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ABSTRACT

A one-year Post-Master's Fellowship in Oncology Nursing Education for nurse educators was developed through the collaboration of San Jose State University (California) and University of Alabama at Birmingham. The project was designed to: develop or update undergraduate/graduate oncology nursing programs; provide continuing education for practicing nurses; and promote change roles such as consultant, researcher, or administrator. The model curriculum can be used with an outcome evaluation plan. Staff recruitment and other activities were undertaken, and the model curriculum was evaluated longitudinally at the two universities. Information is included on the selection and admission of fellows, characteristics of fellows, and orientation to the program. Course objectives and core concepts are provided. The scope of the evaluation is described, and the evaluation results are presented. Finally, 14 conclusions and recommendations are included. Appended materials include: criteria for preceptors; the conceptual framework of the curriculum; brief course descriptions; the evaluation plan; activity guides; evaluation interview forms; samples of knowledge and attitude test items; samples of skills checklists; application forms; and tests used in the evaluation of participants. (SW)

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MODEL POST-MASTER'S PROGRAM IN ONCOLOGY NURSING EDUCATION

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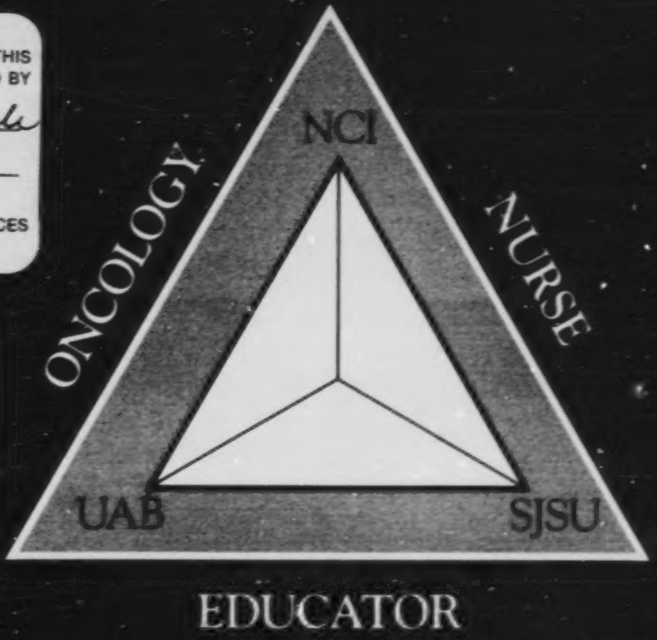

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By:
SAN JOSE STATE UNIVERSITY
San Jose, California

UNIVERSITY OF ALABAMA
Birmingham, Alabama

DEVELOPMENT OF A POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

FINAL REPORT

Reporting Period: September 28, 1979 to June 27, 1984

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PREFACE

This Final Report describes the development, implementation, and longitudinal evaluation of a one-year Post-Master's Fellowship Program in Oncology Nursing Education for nurse educators. Two universities in two very different regions of the country were selected by the National Cancer Institute to develop an innovative model curriculum which was achieved by consensus by the faculties of the University of Alabama and San Jose State University. There was a tremendous collaborative, cooperative approach to this task by the two groups from the very beginning in all aspects of curriculum development, recruitment, and in devising a uniform plan for process and outcome evaluation of the instructional program.

This Final Report, then, is a record of that effort and reflects the work of many individuals. Among the NCI consultants involved throughout the entire project were Josephine A. Craytor, R.N., M.S.N., F.A.A.N.; Jane Dixon, Ph.D.; Lillian R. Gigliotti, R.N., Ph.D. My thanks for their considered input and advice. I would also like to acknowledge the exceptional cooperation and performance by the external evaluators, Malcolm Danoff, Ph.D.; Angeline Jacobs, R.N., M.S.; and James Jackson, Ph.D. Finally, I wish to commend the fellows who enrolled in the very intensive year-long course of study and for their productive work in oncology nursing education following program completion.

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ACKNOWLEDGMENTS

The project staff of the Post-Master's Fellowship Program for Oncology Nurse Educators expresses sincere thanks to the National Cancer Institute, who made the project possible, and the many individuals who contributed to its successful development, implementation, and evaluation.

A special congratulations to the 34 "pioneering" fellows who completed the "model" program. We sincerely appreciate the commitment you gave to this new program and acknowledge your creative efforts to achieve your goals. Postprogram accomplishments speak to your abilities and extraordinary success in providing oncology nursing education to a variety of people.

Janet Louise Lunceford, our NCI Project Officer, is commended for her vision and foresight in recognizing the need for a project to prepare oncology nurse educators and the value of a model consensus curriculum. Her leadership throughout the planning, implementation, and evaluation of the project allowed for stability and consistency. Her guidance of the project and support of the project faculty via letters, telephone calls, and site visits was a constant encouragement throughout the program.

NCI consultants Jo Craytor, Lee Gigliotti, and Jane Dixon generously contributed their expertise, experience, and wisdom during the past five years. They represented a unique combination of expertise and assisted the project staff to achieve a high level of performance. The consultants' warm, sincere interest in the project and project faculty was appreciated.

The three evaluators, who were an integral part of the project staff, deserve accolades for their excellent evaluation design and ability to keep us on track. Each evaluator contributed a unique area of expertise in this collaborative endeavor. The longitudinal evaluation design and related tools contribute a valuable resource to others involved in curriculum development and evaluation.

The universities' administration and faculty are thanked for facilitating the project staffs' participation in the project. The encouragement, guidance, and support given throughout all the contract phases contributed to the successful implementation of the project.

The University of Alabama School of Nursing at the University of Alabama in Birmingham expresses a special appreciation to the Comprehensive Cancer Center and the University of Alabama Hospitals and Clinics for contributing to the educational experience by their generous sharing of expertise, learning, and clinical resources, and providing a climate conducive to the fellows' learning.

San Jose State University Department of Nursing recognizes the contribution of the numerous preceptors, physicians, and other care givers in approximately 10 health care agencies who assisted us in providing clinical and educational experiences for the fellows. The administrators and staff at Stanford University Medical Center, a member of the SJSU consortium, were outstanding in their willingness to share a wealth of clinical facilities and resources. We were grateful for widespread community support.

The support of the fellows' home agencies and agencies that employed the fellows postprogram was essential for the success of the project. We appreciate that they had the vision and confidence in our program to encourage their faculty members and/or clinical nurses to attend a new program. The agency cooperation during follow-up site visits was outstanding, permitting the evaluation phase, an innovative component of the project, to be completed.

As project staff, we acknowledge our individual contributions in a team effort. The willingness to develop a consensus curriculum was at the heart of the project. During the years of implementing the project, there was a growing respect for each other, appreciation of generous negotiation, and awareness that faculty can work productively toward common goals, even though geographically far apart. We encourage collaboration between faculty groups who have similar goals for improving client care and providing opportunities for nursing education.

The project secretaries made our lives easier and our products readable. We sincerely thank them for all their kindnesses and patience.

It was rewarding to work with many concerned health care givers and educators throughout this five-year project. Their insight into nursing education needs and all phases of cancer care provided valuable knowledge and resources for both faculty and fellows.

The Project Directors

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GLOSSARY OF TERMS AND WORKING OPERATIONAL DEFINITIONS

Advanced clinical oncology practice: implementation of skills that involve integration of complex care needed for cancer patients.

Affective skills: having personal values, judgment and feelings with the ability to relate these values to others.

Ambulatory care: outpatient care, treatment, and consultation given in a clinic or home setting.

Certificate: award for completion of a program.

Change roles in oncology nursing:

Consultant: an individual who has knowledge and expertise in oncology which s/he shares with caregivers or providers, either family or health professional.

Administrator: an individual able to supervise or explain organizational management practices and functions necessary to provide health care delivery at the group, unit, or agency level.

Researcher: an individual with knowledge of the research process who is able to: (a) identify viable areas of study, (b) evaluate research, and (c) conduct research.

Clarke Activity Vector Analysis (AVA): Clarke Associates research instrument made up of 84 nonderogatory adjectives which describe perceptions of selected concepts.

Detailed descriptions of personality profiles have been developed on the basis of groups of adjectives selected.

Clinical trials: treatment protocols used in cancer treatment where the patients progress is monitored closely as to treatment effectiveness, side effects, degree, and length of remission (a clinical research study involving surgery, chemotherapy, radiation, monoclonal antibodies, interferon, etc.).

Consensus curriculum: correlation and agreement between San Jose State University and University of Alabama staff regarding program and intermediate objectives, core content, and evaluation procedures.

Cognitive skills: knowledge of theories, concepts, and facts in the designated course or area of study that has been internalized; and being able to teach or relate these theories to others.

Consortium: different institutions working together on a project or toward a common goal in which each institution offers a specialized service.

Course objectives: those objectives which are part of each course and facilitate the implementation of class content. Several program objectives can be met in one course, and some program objectives are met in more than one class.

Core clinical course: basic and advanced oncology knowledge/skills which are a foundation on which to build expanded skills and concepts.

Core knowledge: essential theories and concepts needed to function effectively in a designated field, e.g., cancer nursing or cancer education.

Delivery systems of cancer care: methods or models of implementing cancer care (i.e., (a) prevention/screening, (b) diagnosis, (c) treatment modalities, (d) rehabilitation, and (e) hospice care) using primary, secondary, or tertiary care.

Demonstration model: a curriculum which is developed as an example to demonstrate new or developing ideas that need to be tested.

Evaluation:

Student evaluations are teachers' evaluations of student competence.

Course evaluations are students' evaluations of a specific course.

Program evaluation is process and outcome evaluation of the program including all courses and activities.

Field work: implementation and integration of ideas in a clinical setting after the concepts are learned in a course or program.

Framework: use of one or more theories or concepts to build new propositions and guidelines for curriculum research and practice.

Home health care agancy: a service in which a nurse manages patient care in the home through regular visits.

Institutional characteristics: demographic and internal composition of a place of employment of fellows.

Knowledge/skills/attitudes: cognitive, psychomotor, and affective components of behaviors used to implement nursing process.

Learning resources: aids that help in learning, conceptualizing, or internalizing knowledge (audiovisual, reading materials, demonstrations, and clinical practice).

Model curriculum: similar to demonstration model, e.g., development of new and innovative ideas to promote cancer education.

Nursing process: a method of enacting nursing care which includes four phases: (a) assessment, (b) planning, (c) implementation, and (d) evaluation.

Nurse educator: an individual who develops, promotes, and teaches a broad and holistic spectrum of nursing concepts to nursing students, practicing nurses, or patients.

Nurse/clinician: an individual who is engaged in direct care with patients/families. This nurse has specific advanced skills and knowledge in a nursing speciality, e.g., oncology or family nurse practice.

Phases: time periods of contract implementation:

1. Development: writing of program and course objectives, course content, and evaluation materials.
2. Implementation: 3-year period when the coursework was given to oncology fellows.
3. Evaluation: written testing, oral discussions, and other feedback throughout and after the program to document fellow progress and program effectiveness.
4. Data analysis and reporting: analysis and interpretation of evaluation data incorporated into final report and national presentations.

Plan for continuance: plan related to extending course offerings beyond the completion date of the contract.

Preceptor: faculty or agency staff with specific expertise who agrees to monitor activities of the fellow and act as a consultant.

Project objectives: the 19 management objectives which were guides for timely completion of tasks, e.g., time frame, cost, etc.

Project objectives: the broad and intermediate objectives which were used to guide and develop courses.

Pretest: battery of examinations given at beginning of program, before starting classes, to document entering knowledge, attitudes, and skills.

Posttest: battery of the same examinations used as pretests which were given at the end of the program to determine the knowledge, attitudes, and skills learned from the program.

Pychomotor skills: physical ability to do mechanical procedures which includes cognitive and affective components.

Regional training site: a designated area for obtaining or learning specific knowledge. This site may be specialized in a certain field of knowledge and treatment, and uses internship or fellowship programs to teach the content.

Role verification: identification and reporting of roles and responsibilities of fellows in pre/postprogram employment.

Trainee pool: number of people with specified credentials from a geographic area from which to select students or practitioners.

Trainee recruitment: process by which students are identified, screened, and evaluated for admission to a program.

Section 1

OVERVIEW OF PROJECT

Introduction

The development of a Post-master's Program in Oncology Nursing Education grew out of an urgent need, identified by nursing leaders in oncology, to increase the number of nurse educators with advanced knowledge and experience in cancer nursing. Following completion of a year-long program, the graduates were expected to return to their preprogram employment settings, or to new jobs and functions, as oncology nurse educators.

Two premises were the basis for program development. First, approximately 30 units of graduate study in selected content areas would prepare the educator to achieve the desired goals of the project. These goals were to: (a) develop or update oncology nursing within undergraduate or graduate degree programs and (b) provide continuing education for practicing nurses, and (c) function in change roles such as consultant, researcher, or administrator. The second premise was that nursing faculty would be interested in further graduate level courses with both an education and clinical focus, but would need some financial support to complete the year-long program. These premises were explored and evaluated during this study.

At the initiation of the contract, there were no programs with the primary purpose of educating oncology nurse educators except for a few short-term courses offered in schools of nursing or in clinical agencies. As a result of this deficit, the National Cancer Institute issued a Request For Proposal (RFP) to resolve the problem. The contracts were not awarded to individual schools to develop their own curriculum, but an innovative approach was used. Two differently structured programs were to: (a) develop a consensus model curriculum with common objectives, (b) implement the curriculum within the constraints of their respective universities, and (c) develop and use the same outcome evaluation plan. The contracts were awarded to the Department of Nursing at San Jose State University (SJSU) and the School of Nursing at the University of Alabama in Birmingham (UAB).[1] In September of 1979, these schools began the 5-year collaborative effort.

Two factors strongly influenced the project: (a) the educational preparation of faculty at the time and (b) the distribution of qualified oncology nurse educators. In the mid-1970s most nurse educators teaching in degree programs were masters' prepared; a small percentage of them had doctorates in nursing. Continuing education of faculty was an expectation in all academic settings. A certificate program offering graduate level credit was an appropriate undertaking in that academic milieu.

---

[1] Department of Nursing, San Jose State University (Contract number N01-CN-95480), School of Nursing, University of Alabama, Birmingham (Contract number N01-CN-95428).

Faculty adequately prepared in oncology nursing are generally employed by universities in large urban areas. In underserved regions which have no oncology educational programs, collegiate facilities, or inservice courses, educators may not have the clinical knowledge and skills necessary to develop and implement specialized educational programs in oncology nursing. Therefore, advanced preparation of oncology nurse educators is best done in an educational institution with access to clinical facilities providing expertise in health care delivery to oncology clients.

It was beyond the scope of this project to explore the impact on underserved areas, or the effect upon direct patient care. The geographical locales of the graduates' pre/postprogram are identified in the report as well as recipients of their educational offerings. Several fellows did go to underserved areas and had considerable success in developing educational opportunities for nurses providing care to cancer patients.

In this final report, SJSU and UAB project staffs are pleased to share their experiences and outcomes during this collaborative endeavor. A great deal of energy, negotiation, and mutual growth have occurred in the 5 years of working together toward common goals. There was consensus planning in developing management strategies as well as in curriculum building and evaluating. Our common goals to develop, implement, and evaluate a model curriculum in oncology nursing education were achieved.

Demonstration of Needs

In addition to the deficiency in the number of qualified oncology nurse educators, the complex nature of cancer prevention, diagnosis, and treatment has alerted the nursing profession to two other major needs: (a) the need for preparation in oncology nursing at all levels, and (b) the need for a core curriculum for oncology nurse educators.

Need for Preparation in Oncology Nursing

The need for preparation of nurses who can provide quality care for people with cancer is apparent when the prevalence of cancer is considered. Cancer is the second leading cause of death in the United States, resulting in 20% of all deaths. Cancer nursing is practiced by a large number of nurses working in both acute and home care settings. The quality of cancer care is largely dependent upon the expertise of these nurses with responsibilities encompassing a variety of complex skills. Essential skills include: (a) preventive and screening measures; (b) nursing care and support of client and family during diagnosis and recurrence; (c) acute care during treatment (i.e., surgery, chemotherapy, radiation, immunotherapy); (d) counseling and teaching during all phases of treatment and rehabilitation; (e) support of patient and family during crisis periods; and (f) care of terminally ill patient and their family.

Nursing has been confronted with three issues resulting from the high incidence of cancer and the need for oncology nurses. These issues are:

1. Many nurses who identify themselves as oncology nurses on the basis of on-the-job training have no formal education in oncology.

2. The complex nature of cancer nursing necessitates the development and strengthening of oncology education programs at the undergraduate, graduate, and continuing education levels.

3. The distribution of nurses and faculty specializing in oncology is such that most rural areas as well as some large metropolitan areas with medical centers are underserved.

The above concerns have been documented by nursing surveys. Miller (1978) conducted a survey with Oncology Nursing Society members and the Association of Pediatric Oncology

Nurses. Sixty-seven percent of the nurses did not have a bachelor's degree and had little opportunity to acquire knowledge and skills needed for oncology nursing practice. Six percent of nurses had master's degrees in nursing at the time of this survey. There were only 10 programs in the country at which oncology nursing preparation could be obtained. Oberst (1981), in an ONS survey, polled 254 nurses of which 79 had baccalaureate degrees and 49 had master's degrees. At this time there were 16 schools in the country preparing oncology nursing specialists. Piper's (1979) survey demonstrated that, in Northern California, the concentration of oncology nurses with degrees was in the San Francisco Bay area where there is a large number of medical centers.

Need for Core Curriculum For Oncology Nurse Educators

Identification of core content in nursing specialty helps the educator to effectively select and teach theories and concepts at the undergraduate and graduate levels of nursing education. Through program consensus, it was determined that the oncology nurse educator not only needs expertise in oncology theory and practice and curriculum development, but would greatly benefit by exploring change roles. As a result of defining the likely functions of an oncology nurse educator, a curriculum with three foci was developed.

The foci were: a clinical nursing component, an education component, and a change role component.

Four major standards were selected as a guide for curriculum development: (a) Oncology Nursing Society Standards, first draft (1979); (b) American Nurses Association Standards (1973); (c) American Cancer Society Curriculum Guide (1979); and (d) Association of Pediatric Oncology Nurses Standards (1978). In addition, the University of Alabama School of Nursing Oncology Nurse Practitioner Program served as a source for curriculum development.

The development of a core curriculum in oncology nursing education contributes to the further development of standards of practice and a taxonomy of oncology nursing behaviors at the undergraduate and graduate level. The longitudinal evaluation of the model curriculum at two sites demonstrates the merits and limitations of the model.

Goal Of Project

The Division of Cancer Control and Rehabilitation (DCCR)[2] of the National Cancer Institute wished to demonstrate that the shortage of nursing faculty prepared in oncology nursing could be reduced by supporting training centers. Such centers would prepare nurse educators in collegiate schools of nursing or in health care agencies that presently do not offer specialized education in oncology nursing. To accomplish this goal, the Research Contracts Branch of the National Cancer Institute nationally distributed RFP No. N01-CN-95428-05 entitled, "Development of a Model Post-Master's Fellowship Program in Oncology Nursing Education," during the fall of 1978. UAB and SJSU responded to the RFP and received the contracts which began in September 1979. Fellows were accepted to the two project sites from all geographical regions of the United States.

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[2] The cancer control mission of the National Cancer Institute is now in the Division of Resources, Centers, and Community Activities (DRCCA).

The RFP clearly outlined the statement of work to be considered by the offerors when submitting their proposals. An important feature of this contract was the expected collaboration among contractors on: (a) the major components of the model curriculum for oncology nurse educators and (b) evaluation strategies and tools for analysis of outcomes. Essential elements of the curriculum to be included were identified in the statement of work. The model curriculum, developed under the contracts, would become the property of the Federal government.

This project was intended to train nurse educators as opposed to nurse clinicians. It was expected that upon successful completion of the program, the fellows would return to their schools or agencies to develop, modify, or improve, and then implement programs of training in oncology nursing. The National Cancer Institute provided a stipend of 75% of the trainee's salary (upper limit $10,000) with the supporting institution providing the remainder when economically feasible.

The study and evaluation of this model curriculum is intended to serve as a resource for other graduate oncology nursing programs. National dissemination of findings will occur through conference presentations, articles, and widespread distribution of the final report.

Project Design

Consensus Approach

The awarding of two contracts afforded faculty members from UAB and SJSU a unique opportunity to collaborate during the four phases of the project: (a) planning and development, (b) implementation, (c) follow-up evaluation, and (d) data analysis and reporting. Annual contractors' meetings with the NCI project officer and three oncology consultants were valuable in guiding the cooperative efforts. An important feature of the collaboration was the development of management strategies to meet the common objectives. There was a division of labor among the project personnel to accomplish these tasks in an orderly fashion. At each site faculty perceived some program needs differently, which necessitated idea exploration and compromise during the feedback communication loops. Before the implementation phase began, consensus decisions were reached about the philosophy, conceptual framework, objectives of the model curriculum, and program evaluation.

Each contractor developed a curriculum pattern to meet the broad and intermediate objectives of the model curriculum. These curriculums were consistent with the graduate programs of the university in which they were located. Faculty and evaluators from both sites agreed upon the pre/postprogram evaluation tools and pooled the data for analysis. Collaboration of the major tasks in curriculum development made it possible to implement a model curriculum in two different regions of the country with a common evaluation plan.

Broad Program Objectives

The oncology nurse educator needs a comprehensive knowledge base of oncology nursing theory, curriculum development and change theory to develop, implement, and evaluate effective units of study in oncology nursing. The three prongs of the curriculum were: (a) a clinical component for improving skills in the care of cancer clients and the use of preventive measures with high risk populations; (b) an educational component enhancing abilities to develop, implement, and evaluate programs or units of study in oncology nursing education, and (c) a change component with emphasis on ability to function as a consultant, researcher, and/or administrator in the care of cancer clients. Preceptored experiences in providing patient care, giving educational programs, and developing change roles were an important aspect of the curriculum design. Although a different program of studies was offered at each site, common core content and teaching strategies were used to meet the model curriculum objectives.

Evaluation Methodology

The methodology for the program evaluation, conducted by external evaluators, was determined by consensus of the project staffs at the two universities. The evaluation plan focused on both process and outcome aspects of the program. The process component was used to monitor the project's progress, while the outcome component consisted of a longitudinal study spanning 57 months in which 26 fellows who completed the program at both sites were evaluated. A third group of 8 fellows finished the program at UAB, but did not have postprogram site visits.

Pre/postprogram evaluation included collection of data on knowledge, skills, and attitudes. Because the characteristics of the work environment were considered to affect the ability of a graduate to implement an activity, information about the agencies where the fellows were employed preprogram or immediately postprogram, was collected. This information included organizational characteristics and climate for change. Program evaluators conducted site visits with personnel in the employing agencies and graduates at 9- and 15-month intervals. Information was collected about the nature and quality of each graduate's involvement in oncology and teaching activities. Also obtained were data on benefits or detriments of the program to the fellows and their employing agencies.

To determine the merits of the model curriculum, analysis of the findings of pre/postprogram evaluation was a major goal of the entire project. In this project, a qualitative and quantitative description of the graduates' utilization of their program training indicates the extent to which this program has a measurable and long-term effect.

Scope And Limitations

The contract permitted a longitudinal study of program participants including follow-up site visits and product evaluation, which is an appropriate design for determining long-term effects and impact of curricula. Project staff and the external evaluators jointly developed the program evaluation instruments. The external evaluators collected, analyzed, and retained the pre, post, and follow-up data, thereby limiting the bias from the results and inspiring confidence and openness among the respondents.

Two major limitations existed. The first was the small population involved in the longitudinal study which affects the generalizability of the results. A variety of influences limited the number of fellows recruited into the programs. The first classes had a total of 7 fellows primarily because of the time of year the recruitment was done, Spring of 1980. While this was about 7 months before the first groups of fellows were admitted to each site, it was too late in most academic settings to attract educators, who usually have signed next year's contracts by that time of the year. Recruitment was one of the first tasks that was attended to by the two sites. It occurred as early as was possible, given the starting dates of the projects, the need for some curriculum consensus before preparing the recruitment brochure, and the time required for achieving consensus on the brochure.

The diversity of the participants was both an asset and a limitation to program implementation. There was a wide variety in age, experience, and professional backgrounds and the areas of the country from which students came. Some had problems being a student again and living in a new environment. Adaptation played a part in learning readiness in the early weeks of the program. Learners also came with a wide variety of individual goals.

The second limitation was that there was inadequate lead time for instrument development, which prevented field testing the Knowledge, Skills, and Attitude tests and necessitated using the identical tests for pre/postprogram measurement. While the lack of field testing placed some constraints on data interpretation, most of the problems were resolved by statistical purification of the tests before analysis. For example, attitude items were scored by having project staff agree on the correct direction of response; items that were not keyed consistently by faculty were dropped from final scoring of the instrument.

Summary

The National Cancer Institute identified the need for qualified oncology nurse educators who would plan, implement, and evaluate curricula in oncology nursing at the undergraduate, master's, and/or continuing education levels. The project was accomplished through the collaborative efforts of project staffs at SJSU and UAB. The innovative aspect of the project was the implementation of a model curriculum in two differently structured programs using the same outcome evaluation plan. Details of the development, implementation, and results of the evaluation are presented in the following sections.

Section 2

DEVELOPMENT PHASE

Introduction

The development phase of the post-master's oncology program included the concurrent tasks of program development, course approval, and recruitment. This section reports how tasks were accomplished at two university sites using the same program objectives, philosophy, and outcome evaluation with a variety of teaching strategies and curriculum patterns. Figure 1 demonstrates an overview of the steps in the project curriculum development. Consensus was a major emphasis throughout the entire project.

Development of Project Objectives and Timeline

Project management was organized by 19 project objectives which were developed by consensus to meet contract requirements. The objectives were categorized into four phases (see Figure 2):

1. Planning and development (12 months; 9/79 to 9/80)
2. Implementation (24 months; 9/80 to 8/83)
3. Follow-up evaluation (15 months; 6/82 to 1/84)
4. Data analysis and reporting (10 months; 9/83 to 6/84)

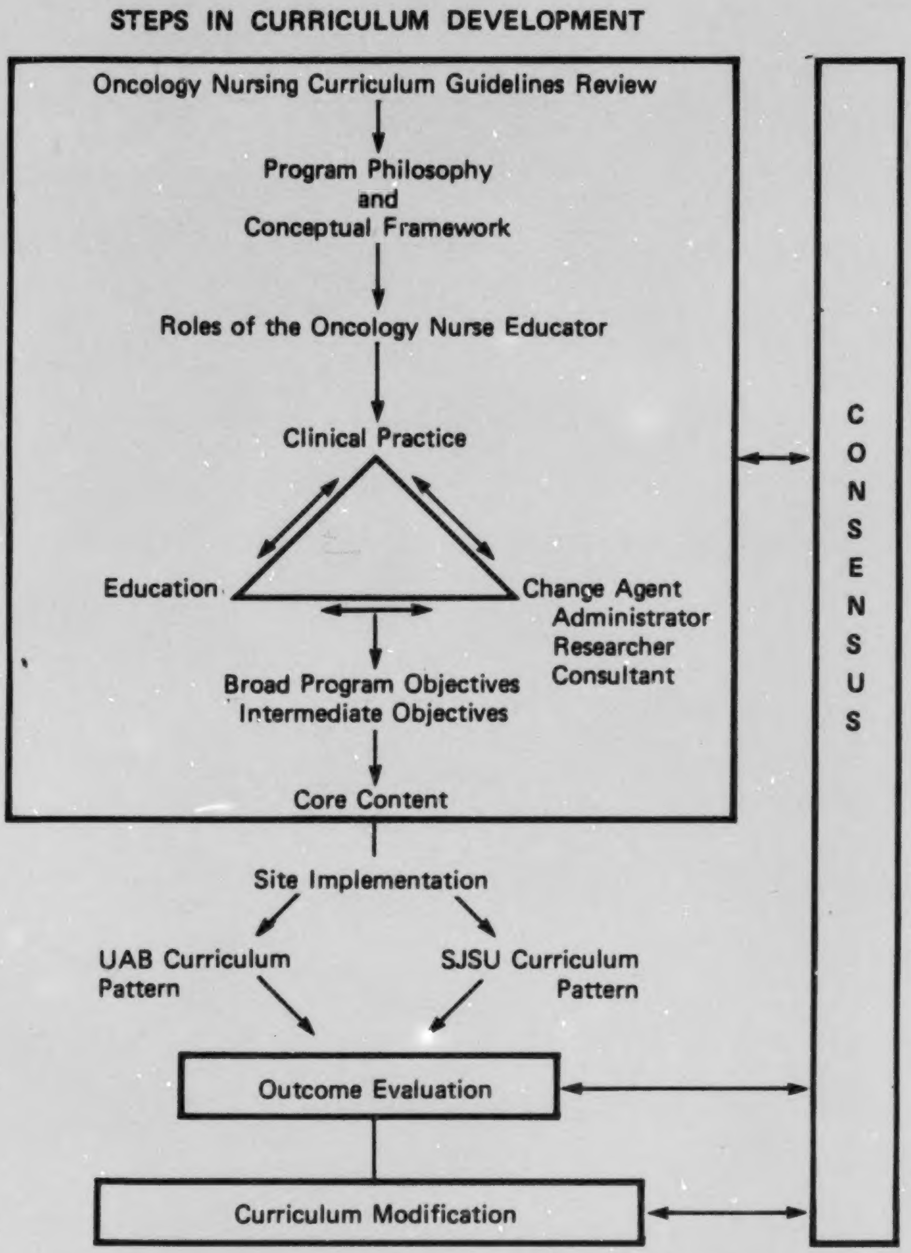
STEPS IN CURRICULUM DEVELOPMENT
Oncology Nursing Curriculum Guidelines Review
Program Philosophy and Conceptual Framework
Roles of the Oncology Nurse Educator
Clinical Practice
Education
Change Agent
Administrator
Researcher
Consultant
Broad Program Objectives
Intermediate Objectives
Core Content
Site Implementation
UAB Curriculum Pattern
SJSU Curriculum Pattern
Outcome Evaluation
Curriculum Modification
CONSENSUS

Figure 1. Post-master's Fellowship Program in Oncology Nursing Education.

Year 1	Year 2	Year 3	Year 4	Year 5
9/28/79 to 9/27/80	9/28/80 to 9/27/81	9/28/81 to 9/27/82	9/28/82 to 9/27/83	9/28/83 to 6/27/84
12	24	36	48	57
Phase 1 – 12 Months Planning and Development				
	Phase 2 – 24 Months Implementation			
	Cohort A	Cohort B		
			12 Months Cohort C UAB only	
			Phase 3 – 18 Months Follow-up Evaluation	
			Cohort A 9 to 15 Months	
			Cohort B 9 to 15 Months	
				Phase 4 – 6 Months Data Analyses and Reporting

Figure 2. Time Plan for Model Post-master's Fellowship Program in Oncology Nursing Education.

Management outlines were developed by both universities with timelines for tasks and subtasks related to the 19 objectives, showing the staff responsible and times the tasks were to be completed.

The following are the project management objects:

1. Recruit and select qualified key personnel on project staff.
2. Maintain appropriate relationships with consortium representatives and advisory board.
3. Prepare modified technical and cost proposals for contract extension.
4. Obtain approval of fellowship program from appropriate approval bodies for graduate academic credit and a certificate as an oncology nurse educator.
5. Document available trainee pool.
6. Develop and implement a common nationwide fellow recruitment plan.
7. Develop a program application process and admission plan.
8. Select and admit fellows.
9. Develop and implement a consensus curriculum for a 1-year fellowship program.
10. Develop and implement a common plan for outcome evaluation of program.

11. Develop and implement a plan for process evaluation of the program.
12. Design and implement a sequenced course of instruction to meet program objectives.
13. Plan and finalize negotiations for preceptored clinical experiences for fellows.
14. Plan and finalize negotiations for educational experiences for fellows.
15. Develop and utilize teaching/learning strategies appropriate to program objectives.
16. Prepare reports and products required for project coordination and management.
17. Conduct follow-up evaluation.
18. Categorize and analyze evaluation data.
19. Prepare final report and summary of salient results.

Network for Project Development

An extensive network of persons in university and community agencies was necessary for successful project management, curriculum development, and program implementation (see Figure 3). The School/Department of Nursing at each university was awarded the contract and delegated the responsibilities to project staffs.

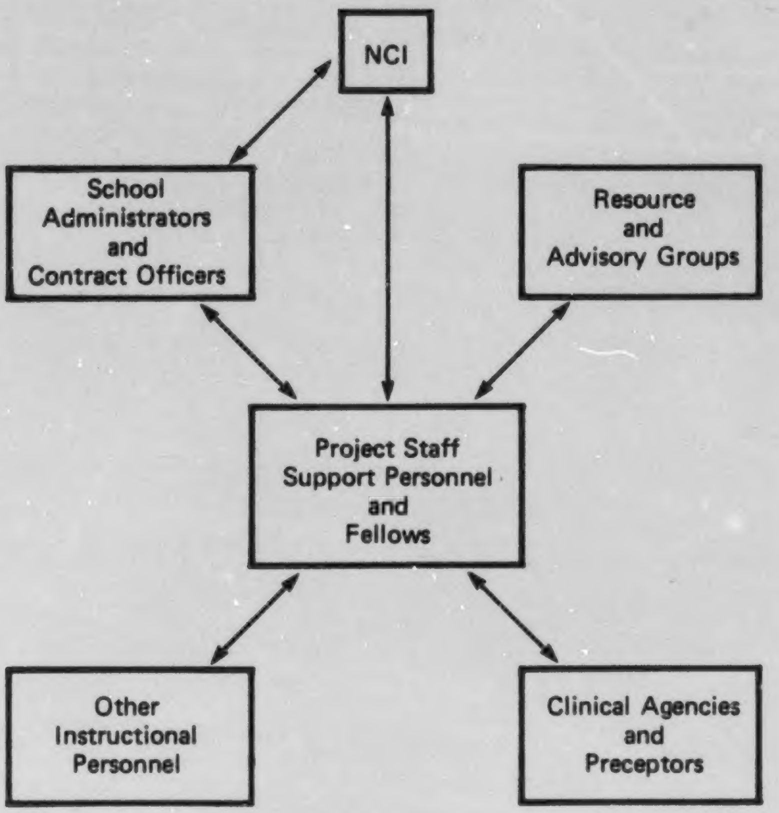
NCI
School Administrators and Contract Officers
Resource and Advisory Groups
Project Staff Support Personnel and Fellows
Other Instructional Personnel
Clinical Agencies and Preceptors

Figure 3. Network for Project Development and Implementation.

A variety of persons contributed to the successful implementation of the program including school administrators and contract officers, consultants, clinical agency administrators, preceptors, other instructional personnel, and resource and advisory groups. University officials granted approval for admission of fellows to graduate study under these programs. School administrators and contract officers provided the administrative support needed to meet contractual requirements as well as office and classroom space, clinical facility contracts, and professional liaison support.

Consortium

At San Jose State University a consortium approach was used with San Jose State University (the Contractor) serving as the fiscal and organizational center, Stanford University Medical Center as the laboratory for clinical experiences, and the University of California at San Francisco was designated as the primary center for continuing education. The University of California, San Francisco, School of Nursing withdrew from the consortium during the first year of the contract. The consortium guidelines for employing faculty included:

1. The consortium institution recommended to the Project Director a full-time or part-time employee who was

qualified and interested in the Associate Clinical Director position for that institution on the project.

2. The Project Director and the Department of Nursing Chairperson reviewed the applicants' transcripts and letters of recommendation, interviewed the candidate, and decided whether or not the applicant should be appointed.

3. When the applicant was appointed to the project, the consortium institution assigned the employee to the project for the specified percent of release time.

4. A contract was written with each consortium institution stating that their accounting department (controller, personnel officer, etc.) was to bill the contract for the specified percent of the monthly cost of that employee (salary and fringe benefits), while the employee served on the project.

In general, the role and function of the Associate Clinical Directors from each institution were to assist the Project Director in accomplishing the tasks as set forth in the Statement of Work. Specifically, these roles and functions included: (a) collaboration with other project staff members in development, implementation, and evaluation of a post-master's model curriculum; (b) participation in student recruitment and selection of fellows; (c) development of criteria and assistance in finalizing negotiations for precepted clinical and educational experiences for fellows;

(d) development, utilization, and evaluation of appropriate teaching/learning strategies and activities, including annotated bibliographic resources and audiovisual materials; (e) participation in the evaluation of the model curriculum and the preparation of associated reports; (f) recommendation for modification and/or revision in the program and assistance in preparing a plan for continuance of the program at the end of the contract period.

At the UAB the post-master's program was contained within the university complex itself and there was affiliation with the UAB Medical Center.

Project Faculty and Secretaries

At SJSU the project director, program coordinator, and associate clinical director were Department of Nursing faculty and were appointed 50% time to the contract. A 50% temporary appointment was negotiated through Stanford Medical Center for a fourth staff member, who was also an associate clinical director.

At UAB all of the staff were School of Nursing faculty. The project director was appointed 50% time with two full-time (100%) faculty members. Provision was made for a full-time secretary at each university.

Project faculty at each site had previously taught oncology content and had clinical oncology experience. All faculty had master's degrees, one had an earned doctorate, and several were working on doctorates.

Administrative and teaching tasks were allocated to staff according to assigned time. The broad areas of tasks were: (a) project management, including coordination of meetings and report writing; (b) curriculum development; (c) recruitment; (d) development of evaluation materials; (e) student advisement; (f) teaching and evaluation of fellows; (g) coordination of clinical agency personnel as instructors and preceptors for fellows; (h) modification of course materials as necessary; and (i) preparation and dissemination of final report.

Project Evaluators

Three evaluators were appointed and worked throughout the project to conduct process and outcome evaluation. The evaluators were external to project staff, that is, they were hired from outside of the university at SJSU (two evaluators) and outside of the Nursing School at UAB (one evaluator). This external factor would be expected to increase the validity of the evaluation component by decreasing possible bias that might have been introduced by an internal evaluation. The design and methodology of the program evaluation are discussed in Section 4.

At each school the evaluators also assisted in teaching appropriate content. The evaluator at UAB helped to develop and teach a course on program evaluation, including evaluation design and methodology. One of the SJSU evaluators taught a segment on development and implementation of project management plans.

Resource People and Agencies

Guest speakers, who had expertise in specific treatment measures or who held special roles in cancer care, were obtained for individual class sessions, conferences, or observational experiences. These speakers were contacted during program development and willingly gave input into course content and experiences.

Clinical agencies and preceptors were identified and community clinical appointments were made to help fellows access specific learning experiences with cancer clients in a variety of settings. At UAB, clinical agency contracts were already in place and much support was given from their Comprehensive Cancer Center. At SJSU, some agency contracts were in place and others were developed.

While the project faculty acted as preceptors for various clinical and class projects as well as the development of the fellow's teaching projects, agency personnel were recruited to facilitate the implementation of teaching units within their agencies and to guide clinical practice. The preceptors were of great value to the program because of their expertise within a wide variety of agencies offering a full range of nursing, medical, and social services to children, adults, and families.

Community preceptors, with their many specialized skills, were awarded voluntary university appointments to the faculty at SJSU with no financial reimbursement. The requirements for this volunteer appointment included: (a) master's degree in area of expertise, (b) licensure in state, and (c) teaching experience or interest in teaching adult learners. See Appendix A for criteria for preceptors. At UAB, preceptors were given a letter of appreciation to be retained in their professional file.

Resource and advisory groups continued to function during the implementation phase. The types of groups utilized were: (a) National Cancer Institute consultants; (b) oncology nurses' organizations and individuals (e.g., American Cancer Society and Oncology Nursing Society); (c) comprehensive cancer centers, particularly the one at the University of Alabama Hospitals and the related nursing advisory group; (d) oncologists, including staffs of affiliated hospitals and protocol groups (e.g., Northern California Oncology Group [NCOG], South Eastern Group [SEG], and Gynecological Oncology Group [GOG]); (e) American Association for Cancer Eduation;

and (f) Alabama Psychosocial Oncology Society. The value of these groups was to assist the staff in: (a) identifying resource people for curriculum content feedback, (b) providing current information, (c) giving feedback on usefulness and relevance of planned learning experiences, and (d) providing a national network for sharing the project.

Learning Resources

The university libraries offered a selection of books, journals, and other learning resources related to oncology and education. Project monies made it possible to purchase additional books and journals appropriate to graduate level oncology nursing education. Learning resource centers were available at each site as well, with audiovisual oncology materials and the ability to develop new audiovisual material for the fellows' educational projects. Each university also provided classrooms and office space.

University Approval of Project Curriculum

The program design included some similarities and differences between the two sites. UAB had a nurse practitioner program in oncology (continuing education) in place when the project was initiated, which provided materials and resources for the post-master's program, while SJSU had no oncology tract previously in place. At SJSU, all courses were developed specifically for the program. Both universities awarded certificates as oncology nurse educators at the end of the program. In addition, at UAB it was possible to earn academic credit with application of credits toward an advanced degree. The post-master's courses were regarded as a functional role component and were accepted in either the doctoral or post-master's level. At SJSU approval was granted through the Dean of Graduate Studies for students completing 200-level courses to receive graduate academic credit which could be transferred into a Master's or Doctoral program at SJSU or elsewhere. UAB utilized elective courses in place at the master's and doctoral levels, while SJSU used only one existing master's level course in conjunction with oncology application of coursework.

Development of Consensus Curriculum

To develop the philosophy, conceptual framework, and broad objectives for the program, both project staffs used resource materials (e.g., oncology education guidelines and textbooks, and their institutions' undergraduate and graduate program materials) upon which to build a strong program. The oncology nurse practitioner program at UAB was also a valuable resource for program direction.

The philosphy included beliefs about: (a) individuals/ families, (b) society, (c) health, (d) health care systems,

(e) oncology nursing, (f) oncology education, and (g) learning. The conceptual framework incorporated systems theory, self-care, and adaptation theory to expand upon: (a) knowledge system, (b) learner system, (c) environment, (d) nursing process, and (e) the health-illness continuum.

The nursing process was emphasized throughout the entire curriculum development, with other main threads being theoretical knowledge, cognitive, affective and psychomotor skills, and attitude of the oncology nurse toward cancer and its implications. Broad program objectives and intermediate objectives were developed to facilitate a three-pronged approach: (a) a clinical nursing component to improve oncology nursing skills, and help the fellow evaluate cancer clients' care in order to facilitate changes in nursing curricula; (b) a nurse educator component preparing the graduate to plan, implement, and evaluate curricula for oncology nursing at various levels of nursing education; and (c) a component dealing with the change role of the oncology nurse educator as a consultant, researcher, or administrator in the health care of clients with cancer. See Appendix B for Philosophy, Conceptual Framework, and Broad and Intermediate Objectives.

Final program approval was obtained at each site after presenting the philosophy, conceptual framework, objectives, and course descriptions to the nursing department and school curriculum committees within each university.

Consensus Development of Intermediate Objectives

Each broad program objective was further delineated for implementation by developing intermediate objectives, which were used as a basis for coursework.

Clinical focus. Combining theoretical knowledge with the nursing process and use of cognitive, affective, and psychomotor skills, clinical objectives were developed including the following major concepts: (a) epidemiology, (b) carcinogenesis, (c) pathological changes common to cancer, (d) cancer screening and diagnosis, (e) common pediatric and adult malignancies, (f) treatment modalities and concepts, (g) ethical consideration, (h) phases of care and delivery systems, (i) psychosocial stress of cancer, (j) oncology nursing practice; and (k) psychomotor and cognitive skills.

Educational focus. Using the nursing process, management and educational theory, a set of educational objectives was developed including the following concepts: (a) educational needs, (b) management techniques and leadership style, (c) learning theories and teaching strategies, (d) characteristics of adult learner, (e) systems theory, (f) nursing conceptual models, (g) steps in curriculum development, (h) resources for developing educational offerings, and (i) evaluation of objectives and teaching strategies.

Change role. Utilizing the principles of research, administration, and change, objectives were developed to demonstrate different approaches to change and being a role model. Major concepts included: (a) preventive health practices, (b) health care planning and delivery, (c) facilitator of change, (d) research role, (e) consultant role, (f) administrator role, and (g) promotion of legislation.

Course Approval

Course descriptions were presented to appropriate university committees for graduate academic credit approval. The courses also received continuing education credit using the Department's/School's Board of Registered Nursing Provider number. All students received oncology nurse educator certificates upon completion of the program.

Selection of Core Curriculum Content

Three different sources were used to identify content areas and develop concepts which became the core curriculum:

1. Surveys of practicing nurses identified content areas which were critical in oncology nursing (VanScoy-Mosher, 1979; Oberst, 1981; and Piper, 1979). Surveys helped to determine the characteristics of oncology nurses in relation to tasks, attitudes about oncology, teaching methods, and evaluation. Essentially the surveys asked what nurses wanted to know about oncology.

2. Standards and guidelines identified both categories and concepts which reflected content needed for oncology nursing practice.

3. Faculty expertise was used at each university site and determined how core content would be organized and incorporated into each program. See Appendix C for the core curriculum developed during this project.

From the broad program objectives, intermediate objectives and core concepts, specific course content was developed for classes, incorporating both didactic and clinical experiences for each of the three prongs. Depending on course design at each university, components of the broad objectives delineated in intermediate objectives were distributed among the various courses. Due to previously mentioned differences of structure in the two universities, the course content was organized and taught with a variety of teaching strategies.

A major task of both project staffs was the verification of critical content, inclusion of all objectives in their program of study, and achievement of the same outcome. This task was accomplished by a careful analysis and check of course content and objectives. During the same time period that course content and classes were being specified, course evaluation strategies and instruments were also being developed. Consensus end-of-program evaluation instruments were developed by the project nursing faculty related to the three prongs: (a) clinical practice, (b) education, and (c) change role. Specific concepts to be tested and the level of test questions were agreed upon. Test questions were written to include factual, application, and insight levels. The same test was given pre/postprogram. Project faculty agreed upon critical clinical skills which would be observed and tested before and after the program. Input given by faculty assisted project evaluators in developing the attitude instrument. Project evaluators were responsible for instruments used to measure organizational characteristics of agencies and follow-up evaluation of the fellows.

Student evaluation strategies within specific classes during the program utilized a variety of testing methods: (a) paper and paper testing, (b) term paper, (c) classroom presentations by fellows, (d) development of a teaching project by fellows, and (e) evaluation of clinical performance.

Recruitment and Admission

National Survey and Recruitment

In 1979, when the National Cancer Institute contracts were awarded, most existing oncology programs were clinical in focus and were not offering specialization in education related to oncology. Therefore, one of the first activities of the project staff was to determine a pool of oncology fellows for the program. A survey for potential fellows was developed and conducted early in the program development period. The survey was developed by SJSU and sent out from UAB to NLN-accredited schools of nursing, hospitals of 250 or more beds, public health departments, comprehensive cancer centers, and divisions of the American Cancer Society. In February 1980, 3,400 program brochures and surveys were mailed out to the above institutions requesting survey responses be returned to SJSU for tabulation.

Sixty-seven (2%) of the agencies and schools responded to this survey and indicated interest in advanced preparation of oncology nursing educators.[3] The responses pointed out some problems in agency support of the proposed program. Problem areas revolved around granting leaves of absence and providing financial support for a fellow to attend a program. The responding institutions indicated administrative support for both curriculum modification and expanding oncology within an existing program, but again had no money for partial support to train an educator to implement these changes. Because of anticipated financial needs, the contract provided a stipend for the fellows attending the program.

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[3] A 2% response rate is considered acceptable in market research when sending unsolicited materials to broadly targeted audiences.

Survey responses were received from the following states:

Far West		Central		Southern		Eastern	
Washington	2	Montana	1	New Mexico	1	Massachusetts	2
Oregon	1	Colorado	2	Texas	2	New Hampshire	1
California	5	Nebraska	1	Oklahoma	3	Connecticut	1
Arizona	3	Minnesota	2	Arkansas	1	New Jersey	2
Utah	1	Wisconsin	1	Louisiana	1	Pennsylvania	4
	12	Michigan	2	Tennessee	3	Virginia	1
		Ohio	3	Georgia	1	Maryland	2
		Indiana	3	Alabama	1	New York	4
		Illinois	6	Florida	1	Delaware	1
		Missouri	2		14		18
			23				

Publicity and fellow recruitment was also conducted by project faculty through: (a) the Oncology Nursing Society Congress; (b) all nursing meetings attended by the project staff, such as American Nurses Association, National League for Nursing, American Cancer Society, Sigma Theta Tau, and other professional conferences; (c) published information describing the program in two professional journals--the Oncology Nursing Forum, and American Journal of Nursing; and (d) personal word of mouth among fellows and faculty. In response to publicity, approximately 670 individual Information Request Forms from all over the country were returned, indicating which university the responders would be interested in attending. Information letters were developed and sent with a university application to each individual returning the Information Request Form.

Recruitment activities indicated a fairly large pool of potential fellows; however, the limited number of fellows admitted to the programs was related to three factors: (a) the increasing numbers of nurse educators enrolling in doctoral programs rather than year-long certificate programs, (b) the declining national economy, and (c) the short time period between the start of the contract and the implementation of the program of studies. There was less than a year in time to identify a pool of students, recruit them, and process admission to the program. Many potential students needed a year or more to make personal and professional arrangements to attend this program of one year in length. As a result, the number of fellows in the first cohort was less than estimated.

Fellow Admission Criteria

Since employing agencies were not able to provide financial assistance to fellows, a contract modification was needed to rescind this criterion. Therefore, the requirement that the fellow return to the same preprogram place of employment was also deleted. These two modifications were necessary to accommodate interests and needs of the majority of fellows. The following criteria were finally agreed upon for entry into the program: (a) Master of Science degree from NLN-accredited school of nursing, (b) ability to meet admission criteria at chosen university site, and (c) commitment for postprogram evaluation.

Application Procedures

Procedures for application and admission to each site were based on a collaboratively developed plan. Student applications were presented to appropriate graduate admission committees based on whether or not the student was also applying to the doctoral program. The program admission criteria were consistent with each university's graduate admission criteria.

During the development phase, the standard application forms used at UAB and SJSU were reviewed for common data. An addendum to the application form was developed to obtain the needed preprogram data. The data desired, which is generally not included in graduate application forms, was:

1. Practice teaching experience
2. Teaching strategies courses
3. Assessment courses

4. Other degrees or certificates
5. Special courses or programs in oncology nursing
6. Nursing experience as related to:
   (a) Type of agency, agency setting
   (b) Position/role
   (c) Percentage of time related to oncology
   (d) Percentage of worktime spent in patient care, administration, research, consulting, and teaching; and
   (e) Levels of learners taught.

Summary

Development and recruitment for the Post-master's Fellowship Program in Oncology Nursing Education took place from September 1979 through September 1980. Surveys had demonstrated the need for oncology nurses and oncology nurse educators. The proposed benefit of the project was to prepare a pool of oncology nurse educators using a model curriculum which would be longitudinally evaluated.

The planning and implementation phase of the contract included the development of: (a) objectives and specific tasks and subtasks; (b) procedures for recruitment of faculty preceptors and resource people; (c) arrangements with agencies for clinical placements; (d) program of studies including philosophy, conceptual framework, intermediate objectives and course content, and testing tools; and (e) procedures for recruitment and admission of fellows.

Communication with potential fellows indicated many of them preferred to enter doctoral programs in their own locales rather than at a distant site with in-residence requirements. The national economy, with a fairly high unemployment rate during these years, was also thought to be a factor related to the small numbers of fellows recruited into these certificate programs.

Potential fellows may have been apprehensive about giving up their jobs, or may have considered that opportunities for employment would be better after doctoral study.

Section 3

IMPLEMENTATION PHASE

Introduction

The implementation phase of the project began in the Fall of 1980 and ended Summer of 1983. Three cohorts of fellows were educated at UAB, and two groups completed the program at SJSU. During the third year, SJSU staff began data coding and final report writing. The numbers of fellows completing the programs were:

	Cohort A (1980-81)	Cohort B (1981-82)	Cohort C (1982-83)	Totals
UAB	4	11	8	23
SJSU	3	8	-	11
	7	19	8	34

The data from both programs were combined for coding and analysis. Cohort A refers to all the fellows who completed the programs in 1980-81, Cohort B identifies the 1981-82 groups, and Cohort C is the 1982-83 UAB group.

This section describes the selection and admission of fellows, their characteristics, and orientation to the program. All of the fellows held master's degrees from an NLN-accredited school of nursing. They entered the program with a variety of nursing backgrounds and master's degrees in various clinical specialties. The heterogeneity of the group was considered in preenrollment advisement and in program orientation, which helped the learner adapt to the learning environment.

An extensive network of persons in university and community agencies, as discussed in Section 2, was necessary for successful project management and program implementation. The contributions of these individuals facilitated this cooperative effort to achieve the contract requirements at both sites.

Although the major portion of the curriculum design was done during the development phase, this section on implementation provides the details about the curriculum patterns and how they achieved the common philosophy, conceptual framework, and terminal objectives. Part of this section focuses on the teaching and evaluation strategies used during the program. The concluding portion of this section gives anecdotes describing the innovative teaching and evaluating strategies used to achieve an understanding of and competence in the core concepts. These anecdotes should be helpful to educators planning experience in oncology nursing practice, education, and change roles.

Selection and Admission of Fellows

The common recruitment brochure permitted the applicants to choose their desired training site independently. All of the fellows who completed application forms met the criteria and were admitted to one of the programs.

Geographical Regions Represented

The pre/postprogram residences of the fellows are summarized in Table 1. Twenty-five states are represented in all four geographical regions of the country. Over half of the fellows came from the southern states and approximately 20% from Alabama.

Prior to entering the program, some fellows knew they would return to their home agency. Others had decided to relocate postprogram, and a few of them were very undecided until the last few months of the program. Fifteen months postprogram, the fellows were providing oncology nursing education in 20 states.

Fellow Characteristics

Thirty-five fellows were admitted to the program. One person dropped out at the end of the second quarter of classes. Table 2 summarizes the data from the application forms. The 26 fellows in Cohorts A and B were evaluated longitudinally, including postprogram site visits.

Table 1

Pre/Postprogram Residence of Fellows

	SJSU Cohorts		UAB Cohorts	
	Pre	Post	Pre	Post
Far West:				
California	1	5		
Washington	1			
Utah			1	1
Central:				
Iowa	1	1	1	1
Illinois				1
Indiana			1	
Michigan			2	1
Missouri	1	1	1	1
Wisconsin			1	
Southern:				
Alabama	1	1	6	8
Arkansas			1	1
Arizona				1
Florida			1	1
Georgia			1	1
Kentucky			1	1
New Mexico	1	1		
North Carolina				1
South Carolina			1	
Tennessee			1	1
Eastern:				
Delaware			1	
Massachusetts			1	1
New Hampshire	1	1		
New York	1	1		
Pennsylvania	3		1	1
Virginia			1	1
Total	11	11	23	23

Table 2

Preprogram Characteristics of Fellows

	Cohorts A and B (n = 26)	Cohort C (n = 8)
Personal demographics		
Age of fellow		
20-24	2 (8%)	0 (0%)
25-29	6 (23%)	3 (33%)
30-39	6 (23%)	3 (33%)
40-49	8 (31%)	3 (33%)
50-59	4 (15%)	0 (0%)
Marital status		
Single	15 (58%)	5 (57%)
Married	8 (31%)	2 (22%)
Divorced-widowed	3 (12%)	2 (22%)
Dependent children		
0	20 (77%)	8 (89%)
1	3 (12%)	0 (0%)
2	3 (12%)	0 (0%)
3	0 (0%)	1 (11%)
Educational background		
Years since BS degree	Range 2-28	Range 3-19
	Median 12.0	Median 11.0
	Mean 12.2	Mean 10.4
	SD 6.98	SD 5.48
Type of basic nursing education		
Diploma	8 (31%)	3 (33%)
BS-BSN	18 (69%)	6 (67%)
Undergraduate GPA	Range 2.8-3.9	Range 2.4-3.8
	Median 3.2	Median 3.1
	Mean 3.2	Mean 3.2
	SD 0.34	SD 0.47
Years since masters degree	Range 0-20	Range 0-14
	Median 5.5	Median 2.0
	Mean 6.3	Mean 4.4
	SD 6.24	SD 4.97

(table continues)

Table 2 (continued

	Cohorts A and B (n = 26)	Cohort C (n = 8)
Educational background (continued)		
Masters clinical area		
Medical-surgical	16 (62%)	5 (55%)
Psychiatric	3 (12%)	0 (0%)
Adult health	3 (12%)	1 (11%)
OB-gyn	1 (9%)	0 (0%)
Community health	2 (8%)	2 (22%)
Pediatric	1 (4%)	1 (11%)
Preparation in masters (or courses)		
Practice teaching	17 (65%)	8 (89%)
Teaching strategy	19 (69%)	6 (67%)
Patient systems assessment	19 (73%)	3 (33%)
None of the above	2 (8%)	0 (0%)
Continuing education courses		
Oncology nursing	Range 0-20	Range 0-9
	Median 2.5	Median 4.0
	Mean 3.8	Mean 4.6
	SD 4.66	SD 3.2
Work experience		
Total years working RN	Range 2.1-28	Range 4.2-19.8
	Median 10.8	Median 4.0
	Mean 3.8	Mean 4.6
	SD 4.66	SD 3.2
Most recent position		
Clinical	6 (23%)	4 (44%)
Teaching	20 (77%)	5 (57%)
Student	0 (0%)	0 (0%)
Agency type--most recent job		
School of nursing	17 (65%)	4 (44%)
Acute hospital	4 (15%)	5 (57%)
Long-term care	1 (4%)	0 (0%)
Community health	2 (7%)	0 (0%)

(table continues)

Table 2 (continued

	Cohorts A and B (n = 26)	Cohort C (n = 8)
Fellow's major goal		
Clinical	6 (23%)	4 (44%)
Teaching	12 (46%)	2 (22%)
Administration	1 (4%)	0 (0%)
Not clearly evident	7 (27%)	1 (11%)
Multiple goals stated by fellow		
Clinical	24 (92%)	9 (100%)
Teaching	23 (89%)	8 (89%)
Consulting	7 (27%)	1 (11%)
Research	14 (54%)	3 (33%)
Administration	5 (19%)	0 (0%)
Other	3 (12%)	2 (22%)

Consistent with project plans, Cohort C completed the same program of study, but did not have site visits and were not included in the longitudinal analyses. The personal demographics indicated that the age range of the participants was over a 30-year span with 18 (53%) in the 25 through 39 age group. Twenty (59%) were single, and 7 (21%) had dependent children. This heterogeneity was related to the years since baccalaureate degrees were received (2-28 year range, median 12 years); years since masters degree (0-20 year range with Cohort C being somewhat less experienced than Coherts A and B; and total years working as a registered nurse (2-28 year range with Cohort C again having less experience overall).

A few fellows had completed their BS degree and then obtained a MS with little work experience; others had many years of teaching and clinical experience.

Knowledge of the fellows' educational backgrounds, work experiences, and individual goals for attending the program was valuable in adapting the model curriculum to the unique needs of each learner. The majority of the fellows completed their basic nursing in a baccalaureate program with a mean GPA of slightly over a B. Medical-surgical nursing was the predominant master's clinical area, accounting for 21 (62%) of the fellows. The 4 persons with pyschiatric and OB/Gyn master's foci had little advanced pathophysiology content and needed review and updating of basic pathophysiology to achieve satisfactory understanding of oncology pathophysiology. These same persons were able to draw upon their advanced preparation in psychosocial aspects of the patient care to enrich seminar discussions. The fellows with community health backgrounds contributed their knowledge and experience to group discussions of home care needs. One individual came with an excellent pediatric oncology base and made preprogram arrangements to ensure a satisfactory clinical placement and to secure a pediatric/oncology/clinical nurse specialist as a preceptor. Several students had additional degrees in other disciplines. The advanced preparation in a variety of clinical specialities was an asset to classroom interactions and assisted all learners to consider the child and adult, clients in the hospital and those receiving home care, and the biopsychosocial aspects of client care.

The objectives of the fellowship program were to increase clinical competence, including physical systems assessment and educator competence. Information concerning master's preparation of related competencies helped to gear the post-master's content to an appropriate level. Twenty-five fellows (74%) had graduate level practice teaching and 26 (76%) had taken a teaching strategies course. The fellows who had no graduate courses in these areas were encouraged to take related courses as electives, or were given extra tutorial help by the project faculty. Sixty-five percent (22 fellows) had taken a patient systems assessment course; the others were encouraged to use the audiovisual tapes available and practice sessions were provided. Two fellows had certificates as nurse practitioners with a high level of competence in systematic physical assessment. One person had an oncology course in her master's degree program, one had a post-master's oncology course, and six people had a postbaccalaureate oncology course. There was a greater number who had completed preprogram oncology courses via continuing education. The range was 0-20 courses, median of 3, with 20 (59%) of the fellows attending 1 to 5 courses. Most individuals had taken some continuing education courses in oncology before applying to the program.

As a part of their application process, the fellows stated the individual goals they desired to achieve during the post-master's program. The evaluators identified the major goal by counting the preponderance of statements related to clinical, teaching, or administration categories. Fourteen (41%) clearly had teaching as their major goal, while 10 (29%) indicated clinical competence as their major reason for coming to the program. A review of the frequency of multiple goals mentioned by each fellow indicated the primary goals of the fellows were to increase their teaching abilities and clinical skills. These goals were consistent with the program objectives and purpose of the contract.

Data concerning the fellows' most recent work experience revealed 24 (71%) were nurse educators from schools of nursing, while 10 (29%) held clinical positions in acute hospitals, long-term care facilities, or community health agencies. All but one of the fellows had been employed in urban areas. The recruitment goal of enrolling nurse educators was achieved.

Program Acceptance Notification

The fellows received a formal notification of admission in sufficient time to make relocation arrangements. Each site devised a plan for payment of a $10,000 stipend per fellow. The arrangments for receipt of stipend monies were a part of the acceptance contract, which included agreement to participate in postprogram evaluation visits. Monthly checks were issued to the fellows.

Preenrollment Advisement and Orientation

Prior to acceptance into the program, all fellows received the program of studies and information about options for electives. Information concerning housing and the community were sent. One site had low and moderately priced rooms and apartments available near campus, with clinical facilities close by or within a 5-10 mile radius. Parking was sometimes a problem for those commuting. The housing costs at the other site were very high, necessitating renting rooms in private homes or sharing apartments at a distance from the campus. Fellows with families found housing more difficult to obtain and very expensive. Project staff assisted the fellows in finding suitable housing. Each fellow at one site needed a car to travel to clinical agencies, often 10-30 miles from the university or fellow's residence. Travel time from agencies to school, elective course schedules, and tight scheduling of classes within the nursing schools' facilities necessitated some oncology courses being held in the evening, a time not preferred by the fellows. Clinical and class schedules for the oncology fellows were also based on availability of clinical experiences and qualified preceptors. Whenever housing, travel, and time problems occurred, these factors influenced the fellows' coping ability and stress levels. Therefore, faculty assistance was given to obtain affordable housing and to adjust the time schedules and travel whenever needed.

In spite of faculty efforts to help the fellows make the transition and to individualize their programs, many fellows experienced stress in adjusting to role changes from faculty and patient care management roles to the graduate student role with course requirements and expectations prescribed by the model core curriculum. Many were living a great distance from their support systems, especially families. Some fellows left their dependent children at home with their spouses or relatives, but felt continued responsibility and concern. Socializing activities were planned and rap sessions initiated to air feelings and solve problems. Fellows were introduced to other graduate students and to people within the community and health care agency settings. One site used a buddy system so that each fellow had a clinical buddy throughout the program. Project faculty members did academic advisement, and each fellow had a faculty mentor with whom to share positive and negative thoughts and feelings during, in, and out of class conferences. Gradually the fellows developed friendships among their peers and with others, and often felt close to one faculty member who could help with coping. In programs consisting of small groups of individuals with a diversity of backgrounds, interests and goals, group cohesiveness cannot be a faculty expectation. Faculty meetings with evaluators helped in planning ways of meeting both individual and group needs.

During the first week of the program general university orientation was given and the Knowledge, Attitude, and Skills pretests were administered. A few fellows expressed negative reactions to this pretesting, particularly since the results could not be given to them, in order to preserve the integrity of the program evaluation. Also, they perceived a difference in their baseline knowledge of oncology nursing.

Network For Project Implementation

Project Staff

The transition from development to implementation was smoothly accomplished in great part because the same persons who developed the model curriculum then instituted the programs. Both project directors remained at 50% time and taught courses in the programs. One site had two staff persons at 100% time; the other site had three staff persons each at 50% time. The staff time allocated to implement the project was the same as during the development phase.

The external evaluators at both sites continued to do process evaluation via monitoring management outlines, wrote sections of reports for review by NCI, and helped design and teach classes offered to the fellows. At one site, program evaluation instruments were administered by the evaluator; at the other site, the faculty administered the pre and post-tests, but did not review the results. During the implementation phase, the evaluators began preparation for coding and analyzing the data.

Other Members of the Network

Close cooperation with agency administrators and preceptors was vital to the program. The excellent community response in providing clinical, educational, and administrative experiences was given at no monetary charge to the contract. These persons devoted many hours to coordinating as well as making available and planning desired patient care experiences and special oncology-related activities. The preceptors were excellent role models and constructively provided evaluative feedback. They formed an essential link for community support of the program.

The variety of agencies used offered a full range of nursing, medical, and social services to children, adults, and families: (a) inpatient acute care units, (b) outpatient clinics, (c) home health care agencies, (d) special cancer clinics and radiation therapy departments, (e) health departments, (f) psychosocial support teams, (g) self-help groups, (h) in and outpatient hospice units, and (i) agency administrators.

One of the strengths of these post-master's programs was the large number of academic units awarded for the program, which included credits for preceptored clinical, educational, and administrative experiences.

Other instructional personnel included university faculty who were guest lecturers or encouraged enrollment of fellows into their courses. These faculty were from within the school of nursing or from other departments of the universities. Although most of the classroom teaching was done by the project faculty, experts from other agencies gave lectures and presented seminars. Disciplines represented were researchers, physicians, biologists, dieticians, and oncology nurse specialists (including some of the clinical preceptors). At UAB, speakers donated their time, and at SJSU a small honorarium was awarded for presentations.

Curriculum Designs

Each site designed a curriculum based on the common broad and intermediate objectives. The programs of studies and brief course descriptions appear in Appendix D. UAB taught courses within the quarter system, and SJSU awarded semester units of credit. The number of units taught in each curriculum design was similar: 30 units at SJSU (3 semesters and a 12-week summer session); 36 units at UAB (4 quarters). There were many commonalities and some variations in the curriculum designs used to implement the model curriculum.

Content Selection and Placement

Considerations for placement of core content within the program design were:

1. Sequencing of learning experience:
    - (a) Some clinical knowledge and skill was needed before major teaching project.
    - (b) There was a need to have theory before or concurrent with preceptored application of content.
    - (c) Availability of experiences determined course sequence--especially teaching projects.
2. Availability of existing courses
3. Number of units per quarter/semester
4. Scheduling of classes and clinical experience.

At UAB existing masters and doctoral-level courses were available to meet some of the post-master's program objectives. Other courses were developed to meet the specific objectives of this program. At SJSU all oncology courses were specifically designed for this program. The pattern of the SJSU master's curriculum was used so that courses could be slotted in at a later date. Keeping programs of study consistent with the parent university and school of nursing was an important aspect in securing academic credits and in planning program continuance.

To verify inclusion of intermediate objectives in each curriculum design, a grid was developed (see Table 3). The major concept from each objective was identified and courses which included this objective were checked. The intermediate objective statements are in Appendix B. The grid demonstrates that common program objectives often were included in several courses to achieve the desired graduate level competency and consistency of behavior. The grid also shows that different programs of study can be developed from the common objectives of a model curriculum. Since the same program evaluation tools were being used for both sites, the cross-checking of intermediate objectives was an important task.

There were some differences in content and course requirements at the two sites. At UAB, all students were required to achieve chemotherapy administration certification from the UAB Comprehensive Cancer Center. The requirement was necessary for fellows to administer chemotherapy in UAB clinical settings. Orem was the major nursing theorist used

Table 3

Verification of Inclusion of Broad and Intermediate

Objective/Concept	N 210	N 21
1.1 Oncology knowledge base	x	x
1.2 Nursing process		x
1.3 Use of standards		x
1.4 Coping intervention		x
1.5 Client-education programs		x
1.6 Use of literature/research	x	x
1.7 Community resources		x
1.8 Multidisciplinary team member		
1.9 Influences on health care behavior	x	x
1.10 Communication and interpersonal skills		x

Objectives

SJSU					UAB							
N 212	N 213	N 214	N 215	N 216	NON[a] 620	NON 652	NED[b] 654	NED 653	NON 656	NED 751	NON 623	NUR[c] 692
x	x			x	x	x			x		x	x
x				x	x	x	x		x		x	
x	x			x	x	x	x	x	x		x	
x				x	x				x		x	
x				x	x	x	x	x			x	
x	x	x	x	x	x	x	x	x	x	x	x	x
x	x			x	x	x	x		x		x	
x				x	x	x			x		x	
x				x	x	x	x					
x			x		x	x			x		x	

(table continues)

Table 3 (continued)

Objective/Concept	N 210	N 211	N 212
2.1 Develop/implement oncology nursing curricula			
2.2 Assess needs			
2.3 Design programs			
2.4 Develop programs			
2.5 Develop/use teaching strategies	x	x	
2.6 Evaluate strategies		x	x
2.7 Use principles of cost effectiveness			
2.8 Use research			
2.9 Select learning experiences			
2.10 Strengthen existing program			

SJSU				UAB							
N 213	N 214	N 215	N 216	NON 620	NON 652	NED 654	NED 653	NON 656	NED 751	NON 623	NUR 692
	x	x			x	x	x	x	x	x	
	x	x			x	x	x	x	x	x	
	x	x			x	x	x	x	x	x	
	x	x			x	x	x	x	x	x	
x	x			x	x	x	x	x	x		
	x	x			x	x	x	x	x	x	
		x				x		x	x		
	x	x			x	x	x	x	x	x	x
	x	x			x	x	x	x			x
	x	x	x		x	x	x	x	x	x	x

(table continues)

Table 3 (continued)

Objective/Concept	N 210	N 211	2
3.1 Role model	x	x	
3.2 Cancer screening program			
3.3 Personal coping with client		x	
3.4 Facilitator of change			
3.5 Lead groups for problem solving			
3.6 Client advocate			
3.7 Consultant			
3.8 Investigate researchable questions			
3.9 Use available resources for care delivery		x	
3.10 Participation in legislation issues			
3.11 Changes regarding personal risk factors			
3.12 Use support groups to develop programs			

[a] Oncology courses. [b] Nursing education course

SJSU					UAB							
N 12	N 213	N 214	N 215	N 216	NON 620	NON 652	NED 654	NED 653	NON 656	NED 751	NON 623	NUR 692
x	x	x	x	x	x	x	x	x	x	x	x	x
				x	x						x	
x				x	x						x	
x	x			x	x		x				x	
				x							x	
				x	x						x	
		x	x	x	x	x					x	
				x			x					x
x	x			x	x						x	
				x					x	x	x	
				x						x		
		x	x	x	x		x			x	x	

s. [c]Nursing courses.

at UAB. At SJSU, fellows were required to participate on a team in the management of at least four major symptoms including malnutrition. Systems theory, eclectically drawing from a variety of nursing theorists, was used throughout the SJSU curriculum in keeping with the undergraduate and graduate programs. These differences in content foci and course requirements were reflected in course outlines.

Curriculum Adaptation to Learner Needs

Clinical placement and activities were arranged after an individual conference to determine each fellow's previous experience, interests, perceived needs, and anticipated future needs. Previous experience was evaluated in terms of all phases of care: (a) preventive, (b) diagnostic, (c) treatment, (d) rehabilitative, and (e) terminal. Experience in hospital, clinic, and home care settings, including working with families and attending caregiver conferences, was provided. Most fellows chose learning activities in all settings, continuing with the same client through care phases. Observation and direct care activities were included for each area of clinical experience. Each clinical site had an identified person to serve as a preceptor for the fellows. Project staff were available among the various clinical sites to assist fellows in meeting their stated objectives, to consult with preceptors, and to collect evaluation data. Each fellow was encouraged to pursue appropriate learning experiences individually and independently. The program of study at UAB included 8 units of electives. The followig list was suggested, but other graduate courses also were approved:

Suggested graduate courses	Units
Family Dynamics	3
Interpersonal Dynamics of Small Groups	2
Administrative-Supervisory Process in Nursing Practice	2
Strategies for Teaching Nursing	2
Psychological Foundation of Learning Applied to Health Care	2
Curriculum Development in Nursing Education	2
Health Education Media	3
Research in Nursing	3
Consultative Process in Nursing	1-2

Fellows were counseled to take curriculum and teaching strategy courses if they had not previously had them. Elective courses received post-master's credit and some were doctoral level.

There were no electives in the SJSU program of study. The fellows could take other master's courses when schedules permitted; however, no one chose to take additional credits.

They did attend workshops and conferences outside the study program for continuing education credit.

Fellows participated in evaluation of each course in writing and during individual conferences. These in-process trainee reactions to the program were helpful in preparing for the next term's courses in planning for the subsequent groups. Minor modification within courses in content sequence, approach, and evaluation strategies were made after Cohort A fellows completed the program. These changes were made to help clarify content or to better evaluate course objectives (i.e., increasing seminar time and more frequent testing in basic concepts course, elaborating content in assessment and management course, and clarifying graded requirements). There were no adjustments in core content based on fellow feedback. Fellows were encouraged to select topics of interest for clinical seminars, issue papers, and care plans.

Relationship of Theory and Practicum Credit Hours

The post-master's oncology program provided preceptored practicum experiences to meet all three broad program objectives. In most instances, the UAB program of study combined theory and practice concurrently within a course. At SJSU, theory courses were separate from practicum courses with the exception of one course which included research and change role seminars. Table 4 summarizes the number of theory and practicum hours.

Table 4

Summary of Theory and Practicum Credit Hours

	Total number theory hours	Total number practicum hours	Grand total
	UAB		
NON 620	40	100	
NON 652	40	80	
NED 654	30	-	
NON 655	40	100	
NON 623	20	160	
NON 692	20	-	
Other Courses	210	-	
Total	400	440	840
	SJSU		
N. 210	60	-	
N. 211	75	-	
N. 212	-	225	
N. 213	45	-	
N. 214	60	-	
N. 215	-	135	
N. 216	30	240	
Total	270	600	870

The numbers in Table 4 represent university-designated separation of theory and practice as identified in the approved courses; however, in actual practice, the acquisition of theory and discussion of application to client care and teaching situations occurred in all courses.

Teaching and Evaluation Strategies

Individual course materials at each site included: (a) a course description, (b) unit value, (c) prerequisites, (d) course objectives, (e) course requirements, and (f) evaluation criteria. A review of these individual course materials indicates a great similarity in the categories of teaching strategies used. There was a minimal amount of didactic lecturing and only one or two courses in which objective examinations were used. There was extensive use of topic-focused group sharing in seminars, with individual and group presentations as appropriate.

Evaluation of fellow's attainment of course objectives were developed at each site (see Appendix E). Criterion referenced grading for individual activities was used in each course. As it was important to evaluate individual fellow's progress, there were a minimum of group graded activities. Appendix F contains samples of activity guides given to the fellows with the detailed criteria.

In addition to didactic lectures, seminars, and objective examinations, a variety of teaching and evaluation strategies were used to achieve the broad objectives.

Objective 1. Evaluate the quality of health care provided to cancer clients and to implement change in the cognitive, affective, and psychomotor components of nursing care programs as indicated to improve care. Strategies included:

1. Case presentations by nurse specialists and physicians in classroom settings
2. Development of nursing care plans
3. Health assessments in hospital, home, and hospice
4. Critique of nursing protocols and standards
5. Problem solving of simulated problems
6. Use of videotapes and reference books
7. Satisfactory clinical performance based on individual contracts with faculty and preceptors--assessing their learner needs, writing objectives, planning course of action to achieve objectives, evaluating their learnings
8. Clinical experience with pediatric and adult clients in a variety of settings dealing with needs/problems common to the age groups
9. Observation and participation in phases and continuum of health care delivery
10. Classroom seminars related to ethical issues with medical social work, family counselors, and doctoral students or faculty

11. Use of interdisciplinary team members while providing direct client care, and participation in team rounds
12. Staff and preceptor validation of critical skills needed to provide quality care for cancer patients.

Objective 2. Plan, implement, and evaluate curricula which prepare oncology nurse clinicians at the undergraduate, graduate, and/or continuing education levels to function in a variety of health care agencies. Strategies included:

1. Application of theory of evaluation and development of tools/strategies
2. Performance of a needs assessment for oncology care givers, including determination of feasibility and cost-effectiveness
3. Design, implementation, and evaluation of a unit of study in oncology nursing including conceptual framework, objectives, content outline, and evaluation criteria
4. Use of nursing conceptual models in practice and education

5. Critique of educational materials (e.g., audiovisual, filmstrips, videotapes, and educational information from the National Cancer Institute and American Cancer Society)
6. Exploration and testing of concepts of adult learning, using selected models or theories (e.g., Erickson, Havighurst, or Knowles).

Objective 3. Function as a consultant, researcher, and/or administrator in cooperation with other health professionals who are interested in the health care of cancer clients. Strategies included:

1. Discussion of preventive health practices and role of nurse in modeling these practices
2. Analysis of health care delivery systems exploring nursing roles in these systems
3. Discussion of change theory and strategies for effecting change in individuals, groups, and agencies
4. Exploration of current issues in oncology nursing research and assessment of administra-tive and political climate for research
5. Critique of research studies and abstracts in oncology nursing and education

6. Development of a research question, with related literature survey
7. Discussion of grant and proposal preparation for research and curriculum building
8. Discussion of consultant behaviors of the oncology nurse educator; seminars with oncology nurse consultants, and educators
9. Experience as consultants for undergraduate and graduate students working in screening clinics and with cancer patients, for nurses in general care and oncology units in university associated and community hospitals, and for community health nurses in home and hospice care settings
10. Identification of roles and functions of an administrator and effective administrative behavior of the oncology nurse educator
11. Exploration of legislative process at state and federal levels, and identification of strategies for nurses, to influence legislation related to health care and nursing education.

Teaching strategies were sequenced and leveled (i.e., critiquing materials before developing own, discussing research issues before writing a research proposal, analyzing roles before assuming roles). UAB fellows participated in several teaching projects. Each SJSU fellow designed, implemented, and evaluated one 6-hour unit of study. The competencies needed to achieve consensus intermediate objectives were learned in similar, yet somewhat different, ways.

Anecdotes Related to Innovatively Teaching and Evaluating Core Content

The teaching strategies listed in the previous section were enhanced by a variety of unique and valuable experiences to maximize learning of core concepts. The anecdotes described in this section of the report are grouped under core concept categories and represent activities from both program sites.

Content Related to Broad Objective 1

Core concepts: epidemiology and screening.

Anecdote 1. Epidemiology of cancer was discussed by an epidemiologist who specializes in public health education and prevention. Fellows used research findings to identify high-risk populations and cost-effective screening techniques. This exploration led to interest in motivating and teaching the general public to be aware of their role in screening and early detection.

Anecdote 2. Clinical experience was provided in screening clients in: (a) clinics in a medical center; (b) private physicians' offices; (c) community public screening with American Cancer Society and specialized clinics (e.g., lung association); (d) data gathering and counseling clients in community groups (e.g., minorities and medically deprived); (e) student health examinations to assess the inclusion of appropriate health history data and screening measures; (f) federally funded special screening clinics studying cost-effective screening techniques for high-risk individuals.

Core concepts: carcinogenesis, cancer pathology, diagnosis.

Anecdote 1. Pathologists gave lectures with slides and films depicting cellular kinetics, tumor growth and burden, and related pathologies. The presentation included slide demonstration of techniques for reliable histological specimen preparation and discussion of value in making a definitive diagnosis.

Anecdote 2. Attendance at tumor boards and conferences was especially valuable if the conference was on the client for whom fellow was caring. These discussions led to an understanding of the decision-making process in determining diagnosis, stage, and treatment modalities.

Core concepts: pediatric/adult malignancies, treatment modalities.

Anecdote 1. Fellows participated in total client care often using a primary nursing modality. They interfaced with professionals of many disciplines concerned with the patient such as medical staff, agency nursing staff, dietitian, social workers, clergy, and community agency staff. They worked with family members in hospital and at home. The client care often consisted of adjuvant treatment programs combining surgery, chemotherapy, radiation, and immunotherapy. In the process, the fellows were exposed to varied protocols combining a program of drugs or radiation or surgery (i.e., head and neck protocol: "Chemotherapy--3 Rxs of chemo platinum, bleomycin, 5FU. Evaluation with biopsy. If negative, course of radiation. If positive, radical surgical dissection.")

Anecdote 2. Fellows had the opportunity to focus clinical interests by caring for clients in certain age groups with specific types of tumors and in certain phases of care. Therefore, it was feasible to select clients such as: (a) a child with leukemia being prepared for bone-marrow transplant or induction chemotherapy, (b) an adult client going through diagnostic workup and treatment in an acute setting or terminal care in an inpatient or outpatient hospice, (c) a family who was experiencing the stress problems and adjustments in living with cancer, or (d) clients with a particular symptom management problem (e.g., pain control, nutritional problems related to anorexia, etc.).

Core concepts: phases of care and delivery systems.

Anecdote. Fellows participated in providing continuity of care from acute hospital through referral process to the individual home and/or to the hospice as necessary. They identified the problems as the client moved back and forth between agencies and noted the presence or lack of communications and quality of care. Learners became aware of unique problems during treatment, rehabilitation, continuing, and terminal care.

Core concepts: ethical considerations and psychosocial stress of cancer.

Anecdote 1. Learners were aware of and focused on the stresses of cancer as they related to staff burnout, client, and family problems. Some fellows participated in staff conferences and retreats to discuss support needs and stressful client experiences. Two clinical experiences were:

(a) a fellow conducted a staff survey to identify issues and needs in initiating support group and (b) fellows attended and participated in client and family support groups in the community.

Anecdote 2. Fellows had opportunities to explore alternative treatment measures such as laetrile or diet with clients and families who wished to pursue these measures. Often the alternative treatment experience occurred in conjunction with standard treatment, when all other treatment failed, or if clients wanted to stop treatment.

Anecdote 3. Students provided continuity of care by working with clients/family in acute settings and in the home. Stresses in the family unit were often identified and became more apparent when in the home. The fellow was then able to communicate these stresses to other interdisciplinary care members, which increased the understanding of both client and family needs and gave the fellow insight into possible problem areas.

Core concept: oncology nursing practice.

Anecdote 1. Fellows had class seminars in symptom management and then worked closely with faculty and skilled clinical preceptors in developing and implementing assessment tools and providing care for these symptoms. Insight was gained into the stresses and problems caused by symptoms such as pain, anorexia, and nausea. This clinical application later helped in providing application for teaching projects developed by the fellows.

Anecdote 2. Fellows were able to be involved in primary nursing care of cancer clients and family in varied settings: bone-marrow transplant unit, home health setting, acute hospital, and hospice. Often fellows followed clients through several phases of the illness and care, giving the fellow insight into the complex physical health problems and psychologicl support needed in the management of care.

Core concept: cognitive skills for the clinician.

Anecdote. Scenarios or simulated situations were used in classroom settings to help fellows identify appropriate and effective behaviors needed to assess, provide interventions, and evaluate client care in difficult or complex situations. Examples were: a person who suspects a cancer diagnosis, an individual facing a treatment of choice, and psychosocial skills with the terminally ill. These activities helped fellows with clarification of their own values.

Content Related to Broad Objective 2

Core concepts: assessment strategies and management strategies.

Anecdote 1. Critiquing was used as a major tool in evaluating oncology programs. The emphasis was on determining if criteria for the program had been attained. This gave the fellow an insight into the process of program development.

Anecdote 2. Fellows worked within clinical agencies in practice roles establishing rapport with the staff. This interaction later helped to facilitate the fellow's returning to develop teaching programs within the same facility or extend practice ideas in assessment, evaluation, and management of care.

Core concepts: learning theories, teaching strategies, and the adult learner.

Anecdote. Teaching plans were reviewed by faculty and peers for congruence and appropriateness among the following components: (a) topic selected, (b) learning theories used for the group to be taught, and (c) the planned teaching strategies. After feedback, modifications in first drafts of teaching plans were made to achieve congruence. The level of content based on the learner's experience and the time constraints were frequent influences which needed to be discussed with the fellow in preplanning the units of study to be taught.

Core concepts: systems theory and models.

Anecdote. The post-master's program was developed from nursing conceptual models, incorporating systems theory. Orem's self-care was the primary focus at UAB, while SJSU used an eclectic approach including self-care, adaptation, and systems theory. These models were discussed in seminar by the fellows and critiqued for application to cancer clients and care. Each fellow then chose a model and used it as a conceptual basis to develop her own teaching project. This exercise assisted the students in forming their own approach to cancer nursing appropriate to their interests and practice area. Another positive factor was that the feasibility of using nursing models was communicated to nurses attending program presentations promoting some innovative ideas for practice.

Core concept: steps in curriculum development or modification.

Anecdote 1. Students' critiques of an existing oncology program included an evaluation of the congruence among the philosophy, conceptual framework, goals, and objectives. Ideas were shared with faculty and other students in seminars. The unit of study developed by each student was expected to be congruent in these areas, with feedback from faculty and peers.

Anecdote 2. Fellows were encouraged to create management outlines for developing their units of study. The tasks to be done were prioritized. They included feasibility, soliciting support, and cost-containment strategies as well as the steps of curriculum development. The proposal of the post-master's fellowship program and management outlines for the project were available for review by the fellows. Many students modeled their management strategies after those used for the project.

Anecdote 3. Fellows developed their individual and group teaching projects using all the steps taught in curriculum development classes. The measurable behavioral objectives and evaluation strategies were viewed in terms of the environment in which the program was to be taught (e.g., agency needs, guidelines, policies, continuing education credit, and the course requirements). One site required all fellows to develop, implement, and evaluate a 6-hour unit of study related to oncology nursing in an academic program, or in an accredited continuing education course. Students based program selection on needs and surveys, and completed all paperwork required by the Board of Registered Nurses for continuing education offerings.

Content Related to Broad Objective 3

Core concepts: preventive health practices.

Anecdote 1. Fellows did an evaluation of personal risk factors for cancer and designed a plan to modify their own behavior.

Anecdote 2. Opportunities were made available for fellows to participate in screening clinics and preventive health counseling in industry and health agencies.

Core concepts: health care planning and facilitator of change.

Anecdote 1. Learners analyzed the relationship between the values of a given society and its health care policies related to cancer care.

Anecdote 2. Organizational plans in decentralized and hierarchical management systems were reviewed for their impact on the delivery of health care for cancer patients. Private physician's offices and referral agencies were explored, as they are often the client's entry into the health care system.

Anecdote 3. Students presented inadequate or unsatisfactory situations within clinical, educational, and administrative settings to classmates. The analysis included assessing the need for change, recommending strategies, and evaluating the change process.

Core concepts: researcher role in oncology nursing and education.

Anecdote 1. Fellows chose an oncology topic of special interest and did a review of the literature. From this review they developed a research proposal including theoretical framework, research question, and method. Proposed areas of study included such topics as pain control, infection control, hospice, family coping and rest, and nurses' concerns. Some of these proposed research projects were implemented postprogram.

Anecdote 2. Within both university settings many resources were available to support the development of research proposals. Graduate courses were available in research design, methodology, and statistics. Computer courses and workshops were also available. Many students selected these courses as program electives.

Core concept: administrator role.

Anecdote 1. Graduate level courses on administrative theory and negotiation and health care planning were available to students. This content provided rich background knowledge which helped the students understand administration of oncology units and the planning of care. Fellows reviewed relevant literature on the administrative process and used scenarios or simulated situations to identify effective administrative behaviors.

Anecdote 2. Oncology fellows were able to observe faculty members and agency administrators as role models during committee meetings or coordination activities. Data were collected and analyzed on effective administrative behaviors. Fellows gained insight into management skills and team cohesiveness from observing their preceptors work on effective organization and staff development in acute settings and hospice programs.

Core concept: consultant role.

Anecdote 1. While working in clinical settings and developing teaching projects, students were able to assess group process and identify needs or problem areas. During this experience, the oncology fellows often participated as consultants in planning and problem-solving activities.

Examples are: (a) acting as support persons for nurses, (b) providing care to cancer clients, and (c) planning care often in transition from the hospital to the home.

Anecdote 2. Several fellows collaborated on the development of a form to record the consultation process for clients in hospital and clinic settings. They shared these forms with agency personnel and improved the written records of clinical specialists functioning in the consultant role.

Core concept: promotion of related legislation.

Anecdote 1. Fellows became involved in an ongoing crisis with the state board of nursing, outside interest groups, and the state legislature. They met with state legislators and attended hearings and nursing meetings to better understand the issues. Timing permitted the fellows to view the entire legislative process as a revised Nurse Practice Act was approved by the legislature.

Anecdote 2. Fellows talked with persons involved in protecting workers, through legislative effort, from potential carcinogens. They became aware of and stated how they could become involved in legislative activities postprogram either through individual efforts or via professional organizations (e.g., American Cancer Society or the Oncology Nursing Society).

Summary

A year-long, three-pronged model curriculum was implemented at two sites. Thirty-four persons received certificates as oncology nurse educators and graduate academic units for their coursework. All of the fellows were nurses with master's degrees; approximately 60% were nurse educators and 40% had been employed in clinical positions. The heterogeneity of the group was considered in preenrollment advisement and in program orientation in order to help the learner adapt to the learning environment.

Many of the applicants chose to make major geographical relocations to attend the program with some immediate effects, such as high stress levels. Long-term considerations were: (a) whether the fellow planned to stay in the training site area postprogram or return to the preprogram site and (b) how to bear the costs of maintaining two residences for a year.

The two specific curriculum patterns met the common broad and intermediate objectives and recognized the uniqueness of each university program. Similar teaching strategies were used to implement the core curriculum concepts in a variety of courses. Innovative approaches were used to meet individual student's goals and interests and maximize the learning opportunities. Process evaluation activities were developed to provide frequent feedback concerning student achievment toward the goals of the model curriculum.

Section 4

PROGRAM EVALUATION

Introduction

Three external evaluators contributed complementary expertise to the project staffs with their knowledge of evaluation design, statistics, management skills, and nursing education research. As discussed in Section 2, evaluation bias was reduced by using external evaluators, one at the University of Alabama and two at San Jose State University. The evaluation team worked intensively with the project staffs from the two sites throughout the planning, implementation, and analysis phases. Coordination between the three members of the team was accomplished by mail, frequent meetings, and telephone conferences between the two sites.

The overall evaluation strategy was specified in the proposal submitted to NCI. Evaluation activities began at the inception of the project, with delineation of the dimensions to be evaluated and construction of the preprogram data collection instruments. Project staffs at both sites were intimately involved in these early planning activities. Each site took the lead in devloping some of the instruments, with the other site providing intensive review. Often iterative rounds of review were necessary before the instrument was completed. This report provides detailed descriptions of instrument development procedures, and serves as a model for nurse educators who wish to adapt or modify the program evaluation used in this project. Samples of the instruments are shown in Appendixes G through P.

The program evaluation was a decision-oriented, chain-of-events model that focused on process and outcome components. Process-evaluation activities had the dual purposes of: (a) documenting program process in order to interpret outcome and aid in continuation planning and (b) assisting in ongoing program implementation. Outcome evaluation documented the end results and achievements of the program.

The remainder of this section discusses: (a) the scope of the evaluation, (b) the limitations, (c) the evaluation model, (d) the development of the data-collection instruments, and (e) the results of the evaluation.

Scope of the Evaluation

The major goal of the evaluation was to determine the impact of the program on postprogram outcome relative to the participating nurses and their employing agencies. The analysis design took into account the following assumptions and considerations:

1. There is a chain of significant events, which begins with preprogram input, continues through immediate

postprogram performance, leads to on-the-job postprogram activities, and ultimately affects patient care.

2. Outcome can be assessed at several points in the chain of events (e.g., immediately upon program completion and at given intervals afterward). Immediate outcome includes end-of-program achievement in knowledge, attitudes, and skills.

3. Long-term postprogram outcome includes implementation of learning, continuation in oncology-related activities, production of oncology-related materials such as curricula and patient care procedures or plans, job satisfaction and attainment of goals, benefits to the fellows, and benefits to their employing agencies.

4. By obtaining feedback through the process evaluation, program adjustments can be made.

5. Variations in the fellows' background (with respect to personal characteristics, educational experiences, and work experiences) have the potential for affecting fellow performance during and after the program.

6. Growth in the program (i.e., changes in fellows' knowledge, skills, and attitudes from preprogram to postprogram) will affect the fellows' postprogram outcome.

7. Agency characteristics of the fellows' work settings will affect the fellows' ability to implement changes in postprogram employment situations.

Figure 4, the program evaluation model, illustrates the relationship of these considerations. Preprogram input consists of the fellows' demographic and experiential characteristics. Program intervention is the consensus curriculum. Process variables are the processes or mechanisms by which the program is implemented. These include student recruitment and selection, selection of faculty, collaborative relationships among project faculty, educational strategies, clinical facilities, library facilities and other resources of the university, student-teacher interaction, student-student interaction, teacher effectiveness, and many other processes that make the program work. Process evaluation monitors or audits program activities for compliance with planned schedules and events. In addition, process evaluation also monitors the occurrence of mediating events that might have an impact on program implementation and outcome.

Outcomes may be assessed in terms of immediate results (postprogram gains in knowledge, skills and satisfaction of the fellow) and of longer term impact on the fellow, the employing agency, the nursing community, the consumer, and nursing and other communities. Often there is not time within the framework of a project to assess later maturing impact. In this case, it was not possible to measure the ultimate impact on client care, but it was possible to conduct a longitudinal assessment of impact at three points--

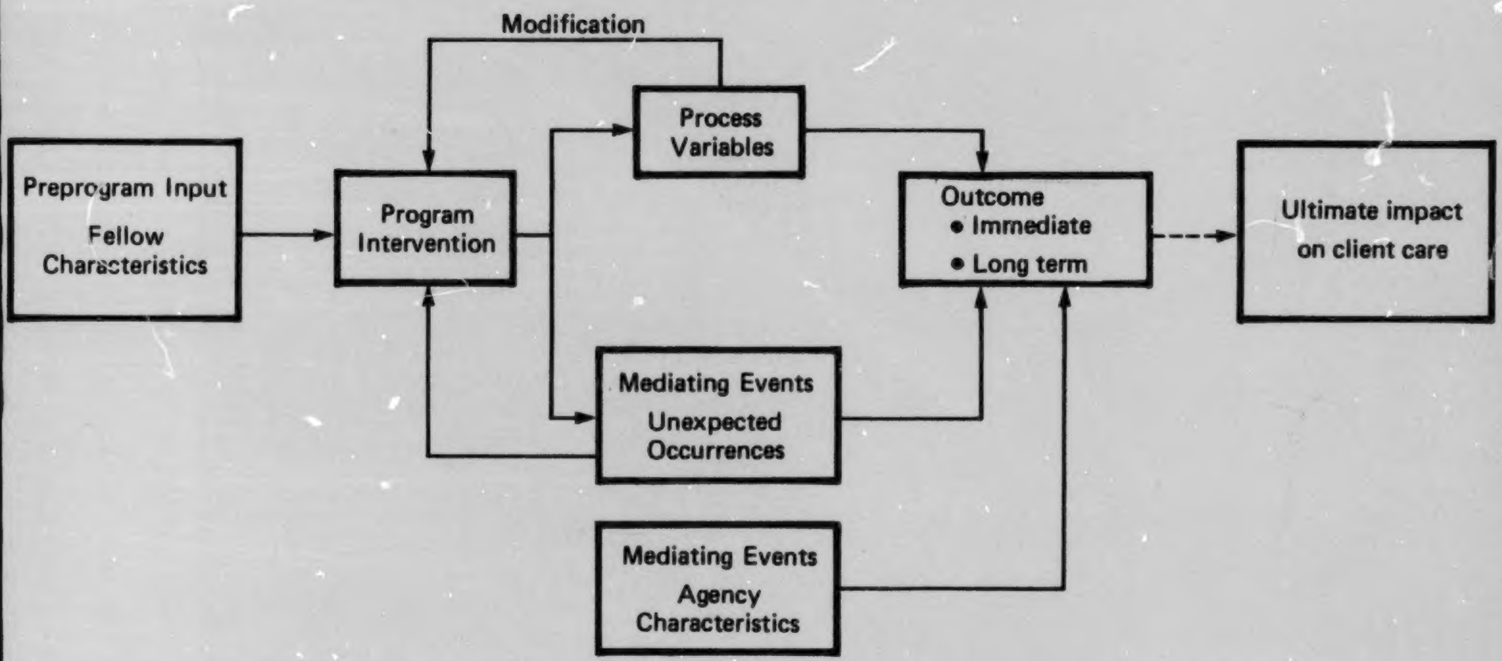
Modification
Process Variables
Preprogram Input
Fellow Characteristics
Program Intervention
Outcome
• Immediate
• Long term
Ultimate impact on client care
Mediating Events
Unexpected Occurrences
Mediating Events
Agency Characteristics

Figure 4. Program Evaluation Model.

immediately after program completion, 9 months, and then again 15 months after completion of the program. The details of the outcome evaluation are provided later in this section.

Limitations

The results of the program evaluation should be interpreted in the light of the following limitations:

1. Some of the evaluation instruments used were not thoroughly pretested because there was not enough lead time from the inception of the project to the first preprogram testing. Specific assessment instruments were developed because there were none in existence that exactly met the requirements of the evaluation. Materials found in the literature, e.g., Dixon's outcome measures for the Yale University Oncology Nursing Program (1980) and the Clarke Activity Vector Analysis (Morrow et al., 1976) were adapted or supplemented, but the remaining instruments were specifically developed for this program.

2. Not all the fellows admitted to the program went back to their same institutions to implement oncology teaching programs, as had been the original NCI goal. This had two effects, which had both beneficial and negative aspects.

a. The employment settings of the fellows were expanded to include clinical as well as academic settings. This had the beneficial effect of enlarging the program impact so that patients were more directly affected (by means of nursing care plans and other patient care materials).

b. Fifty percent of the fellows did not return to their preprogram jobs. While there were beneficial outcomes to both the fellows and their new employers because of this, the evaluation design had to be modified from its original concept. Pre/postprogram evaluation of the fellows was no longer consistently possible because some of them did not return to the same institutions.

3. There was no control or comparison group.

4. Findings cannot be readily generalized, due to the small, nonrandom sample of participants. While it is possible to describe the interrelations among the important dimensions related to program impact, these descriptions should be interpreted as related to the particular sample of fellows participating in the present study. They should be viewed as suggestive and as providing valuable guidance for future planning for program implementation.

Components of the Evaluation

There are four major components of the program evaluation, as discussed earlier in "Scope of the Evaluation": (a) preprogram characteristics of the fellows, (b) process evaluation, (c) immediate outcome evaluation (end-of-program), and (d) follow-up outcome evaluation. For each component, issues and questions examined in the evaluation are noted, and a description of each data collection instrument is given. In general, instruments were developed by the staff at one institution, who took the lead in preparing a draft. Then the other institution critiqued the instrument and consensus was reached on revisions. Where instrument development departed from this general procedure, the unique development processes are discussed in detail later in this section.

Preprogram Characteristics

Following are the major issues and questions addressed, along with a citation of the section of this report that presents the findings.

1. Were the fellows homogeneous or heterogeneous with respect to age, marital status, numer of dependent children, educational background, and nursing experience? (Results are discussed in Section 3.)

2. What were the fellows' goals for the program? (Results are presented later in this section.)

3. Was there a relationship between selected fellow characteristics and program outcomes, such as achievement on postprogram tests of knowledge and skills, and satisfaction with the program? (Results are given later in this section.)

The instruments for collecting these data were principally the university's admission application form with an Application Addendum, and the Request for Employment Verification.

Application Addendum. Constructed as an addendum to each university's standard application form, the instrument obtains additional demographic and experiential data, as well as information about goals and plans. Appendix G shows a summary sheet of the experiential data requested.

Request for Employment Verification. This was a self-report questionnaire completed by the fellow's supervisor, requesting verification of the fellow's employment, description of duties, and ratings of performance. When the fellows changed jobs, an employment verification form was sent to the new agency, but performance ratings were not requested.

Process Evaluation

Basically, the process evaluation consisted of an audit of the accomplishment of project milestones (with immediate feedback by the evaluator to project staff) and assessment of the fellows' evaluations of the program, with emphasis on the following questions:

1. What were the fellows' most significant learnings and how were they learned?
2. What would they have liked to have learned?

3. What were their impressions of the faculty?

4. Did they have the opportunity to evaluate the program?

5. What did they think of the evaluation tools?

6. Was there adequate extracurricular support?

7. Were there adequate clinical/educational experiences?

Also the process evaluation examined two types of mediating events:

1. Those that happened during the program, such as: (a) contract modifications, (b) fellow characteristics that might affect performance in the program (e.g., number of dependent children, maturation, whether background was clinical or education; and (c) unexpected life events (e.g., a fellow had a car accident enroute to the university and needed extra help in getting settled).

2. Those that affected outcome in terms of the fellows' postprogram employment situation, such as: (a) fellow characteristics (e.g., number of dependent children, career goals); (b) nature of the job taken on program completion--same job, new job; and (c) agency climate for fellows to apply learning.

Process evaluation was accomplished by the following mechanisms: (a) process audit; (b) individual course evaluations by fellows (standard university format); and (c) end-of-program evaluation by fellows (debriefing interview).

Process Audit Guide.

Development. Based on the evaluation design model, each university developed its own task and milestone chart (listing specific tasks, persons responsible, date due, date accomplished, and comments) and its own audit mechanisms.

Description. A Process Audit Guide and a Task/Milestone Chart are shown in Appendix H. In the planning phases of the project the audit was held once a month; in later phases the frequency decreased to a quarterly review.

Individual Course Evaluations by Fellows. Standard university forms were used at each of the two sites and project staff used the results to make modifications in program implementation, especially for the second cohort of fellows.

Debriefing Interview. This was a structured interview guide used by the program evaluators at each site to interview fellows during the last week of the program. The instrument addresses both process and outcome variables as summarized below. A complete list of the interview questions is shown in Appendix I.

Process questions. Issues assessed on the debriefing interview are: (a) evaluation of program components; (b) discussion of role transition for the student from clinical to teaching or teaching to clinical, as appropriate; (c) significant learnings; and (d) summary evaluation of program (recommend to friend, come again).

Outcome questions. Data collected included: (a) self-reported competency in clinical skills, teaching skills, administration, consulting, research; (b) specific work plans; (c) specific plans for further education; (d) level of awareness and action regarding cancer risk factors (retrospective pre/postcomparison); (e) other benefits, professional; and (f) other benefits, personal.

Agency Characteristics--Demographic Information. The purpose of this instrument was to collect demographic data about the agencies, including: (a) control of agency; (b) type of agency (education or service); (c) resources for new programs; (d) degree of support for new programs; and (e) any specific oncology programs, courses, or facilities existing or planned. The form was completed at the beginning of the program by the head of the agency of the fellow's place of employment. For fellows who changed jobs, the form was filled out immediately postprogram, as well.

Agency Characteristics--Agency Climate.

Development. Using Larsen's work on organizational variables affecting change in community mental health centers

(1982), an instrument was drafted by one staff, reviewed by the other staff, and subsequently revised.

Description. This form is an assessment of agency climate toward change and of organizational functioning. There were eight dimensions or subscales:

Readiness for change	(6 items)
Past experience with change	(5 items)
Decision making	(5 items)
Communication	(4 items)
Problem solving	(5 items)
Need for change	(3 items)
Division of labor	(1 item)
Environmental facilitators	(4 items)

A sample of the form is included in Appendix P. Data were collected pre/postprogram. Preprogram data for fellows taking new jobs were collected immediately *after* completion of the program. Postprogram data were collected by mail 9 and 15 months after completion of the program from the fellow, the contact person named by the fellow (usually the director of the program), and three-to-five additional staff members in varying positions and of varying length of employment--but with at least 6 month's employment.

In understanding the context in which the fellows changed over time, or were in a climate in which they could change, the analysis plan was to cross-tabulate selected agency characteristics with selected outcome measures, including fellow's job satisfaction and perceived value to the agency.

Immediate Outcome Evaluation (End-of-Program)

The immediate postprogram data consists of: (a) comparison of pre/postprogram scores on knowledge test, attitude survey, and skills inventory and (b) immediate postprogram benefits to the fellow (debriefing interview). The major questions to be answered are:

1. Did the fellows show gains in knowledge, attitudes, and skills from pre to postprogram measurement? The knowledge, attitude, and skill assessment instruments are described below.

2. Were the fellows satisfied with the program and what benefits did they realize? Specifically:

    a. Did the program meet their goals?

    b. Will the program help them achieve 3 to 5-year plans?

    c. Did the program make them more aware of personal risk factors?

    d. Were there other positive/negative outcomes?

    e. Did the program meet the objectives stated in the printed materials?

    f. Would the fellows recommend the program to a friend or colleague?

g. Would the fellows come again to the program?

The instrument used to collect this information was the Debriefing Interview described earlier.

Knowledge Test.

Development. The Knowledge Test was constructed in three parts, each part covering a broad program objective. Major content areas were selected for each part by the staff from the two sites, with input from the NCI staff and consultants. A matrix identifying item content and cognitive level (fact, concept, application of concept) guided item development. Items were drafted and reviewed by the staffs at both sites. Evaluators reviewed item formats and checked the items for congruence with program objectives. Consensus was reached on revisions and additions for the final form. References used in preparing the knowledge test are listed in Appendix J. Sample questions from each of the three parts are given in Appendix K.

Description. The test consists of 151 multiple-choice and matching items. There are three parts: (a) oncology nursing practice; (b) oncology nursing education; and (c) other roles (consultant, researcher, administrator, change role). See Table 5 for a description of the content and number of items for each part.

The types of cancer covered in the Knowledge Test include: lung, colon/rectum, prostate, urinary, leukemia/lymphoma, oral, skin and melanoma, breast, cervix, and esophagus.

As shown in Table 6, a large portion of the Knowledge Test (60%) consisted of application items, a higher level of cognition, then simple recall items. Most of these items were in the form of vignettes that simulated practical situations in clinical nursing, nursing education, and the other roles.

The reliability of the test, based on combined pre/postdata for all 26 fellows, and measured by Cronbach's alpha coefficient, was .87 for the total test, .83 for the oncology nursing practice subscale, .59 for the oncology nursing education subscale, and .62 for the change role subscale.

Attitude Questionnaire.

Development. Major content areas were selected by the staffs at the two sites, with input from the NCI staff and consultants. Some of the items were adapted from the following attitude tests; others were written by the evaluators:

Smith, Carol E. (1980). Cancer nursing assessment and care: A self-learning text. New York: McGraw-Hill, pp. xi-xviii.

Table 5

Dimensions of the Knowledge Test

	Items	Total
Part A: Oncology nursing practice		
Epidemiology	5	
Risk factors	7	
Prevention	2	
Detection	7	
Carcinogenesis/pathophysiology	12	
Treatment modalities/symptom management	30	
Psychosocial	5	
		68
Part B: Oncology nursing education		
Learning theories	6	
Curriculum development	17	
Teaching strategies	2	
Evaluation	11	
		36
Part C: Change role		
Consultant	8	
Researcher	13	
Administrator	17	
Change agent	9	
		47
		151

Table 6

Level of Cognition Represented in Knowledge Test

Percentage of test devoted to	Part A		Part B		Part C		Total	
	n	%	*n*	%	*n*	%	*n*	%
Facts (recall)	3	5	1	3	5	11	9	6
Concepts	22	32	13	36	17	36	52	34
Application of concepts	43	63	22	61	25	53	90	60
	68	100	36	100	47	100	151	100

Roswell Park Memorial Institute. 36-item form developed by Mary Coulson & Faith Hohloch, School of Nursing, Medical College of Virginia.

O'Rourke, Patricia. (1980). *Nurses' attitudes toward cancer and caring for patients with cancer*. Unpublished master's thesis, University of Washington.

One evaluation team developed the first draft. It was reviewed by the other staff, revised, and faculty consensus was obtained by keying the desired direction of response. Agreement was defined by majority consensus, that is, at least 6 of the 7 respondents had to agree. The respondents were 4 faculty members from one site and 3 from the other. There was consensus agreement on 68% of the items (perfect agreement on 47%, and 6 out of 7 faculty agreeing on an additional 21% of the items). Items on which there was no agreement were deleted. The instrument was also reviewed by Dr. David Monsees, Program Director for Statistical and Evaluation projects at the NCI and by the NCI consultants to the project. Their comments were incorporated into the revision.

Description. The instrument is comprised of 150 six-point, Likert-type items, where:

1 = strongly disagree
2 = disagree
3 = moderately disagree
4 = moderately agree
5 = agree
6 = strongly agree.

It yields subscores for Oncology Practice, Teaching, and Change Roles as shown in Table 7. An example of one item for each of these dimensions is included in Appendix L.

The overall reliability of the attitude test was .87 as measured by Cronbach's alpha, and based on combined pre/postdata for all 26 fellows after items that did not have faculty agreement were deleted (see Table 7). The alpha coefficients for the subscales were not as high, particularly those that had a small number of items.

Table 7

Dimensions and Reliability of the Attitude Test

Dimensions	Number of items	Cronbach's alpha coefficient[a]
Oncology practice: patient rights/self-determination, hopefulness hopelessness continuum, patient and family involvement in care, preventability of cancer, emphasis on rehabilitation, iatrogenic stress, quality of life, avoidance of patient by staff, myths/stigma, nurses' feelings, patients' anger/powerlessness, patient's need to be informed, caregiver's attitude toward death, caregiver's attitude about pain management, most difficult/rewarding aspects of cancer care, patient advocacy	61	.72
Teaching: identify needs/goals, responsibility for learning, motivation, sequencing, objectives, compliance of learner, strategies, evaluation	36	.54
Change role:		
Change: pro-bias, readiness for change, need for change, facilitators/inhibitors	53	.75
Research: value, scope, adequacy of oncology nursing research, value of, accessibility of, responsibility for, qualifications for, ethical considerations		
Administration: style, power, authority		
Consultation: qualifications of, role of consultant, role of consultee		
	150	.87

[a] Based on combined pre/postdata for all 26 fellows.

Clarke Activity Vector Analysis (AVA).

Development. This is an established form that has been used in a number of research studies. Permission to use the form was given by Dr. Peter Merenda, Professor of Psychology and Statistics at the University of Rhode Island in a letter dated June 20, 1980. Materials and scoring were donated by Walter V. Clarke Associates, Inc., 2 Jackson Parkway, Providence, RI 02903. The major use of the instrument was intended as a replication of an attitude study performed by Morrow and his associates on nurses' perceptions of cancer nurses and cancer patients (Craytor et al., 1978; Morrow et al., 1976).

Description. The instrument is an 80-item, adjective checklist aimed at obtaining five perceptions. In this study, the instrument requests the respondent to "check those words you would use to":

> Describe the typical hospital patient (typical patient)
>
> Describe the type of nurse who could work best with cancer patients (cancer nurse)
>
> Describe the ideal hospital patient (ideal patient)
>
> Describe yourself (real self)
>
> Describe the typical cancer patient (cancer patient).

The results are expressed in terms of profiles describing the shape of the cluster that emerges when the scores are plotted on a graph. For example, the profile of the reference pattern or stereotype of a typical cancer patient found by Morrow and his associates was:

> a person seen as generally quiet and unassuming, with a sometimes diminished capacity for investing himself in actions necessary to carry out decisions he has made. This person is viewed as anxious to conform and is often dependent upon others for support and guidance. A somewhat nervous person, the patient tends to approach new situations with a degree of caution, some trepidation, and a modest amount of suspicion. This is the type of person often seen as one with a rather strict sense of duty and loyalty, a person whose daily roles and routines are guided by a set of rules or standards. Most often, this is a person who abides "by the book" in most judgment decisions. (p. 1086).

Pre/post shifts in attitudes can be detected by comparing the pre/postcluster profiles.

Skills Inventory. This is a checklist for self-rating competency in 10 skill areas, which actually entail 27 specific skills. The 10 skill areas are listed in Table 8.

Fellows checked one of the following categories for each skill:

1 = I have done this activity and feel competent

2 = I have done this activity, but do not feel competent to do it by myself

3 = I have not done this activity.

Self-assessments on two of the skills (breast examination and venipuncture) were validated by instructor observation on all the fellows at both schools. At one of the schools a third skill (tracheostomy care) was validated by instructor observation on all the fellows. At the other school, the third skill validation was done on a sample basis, so that most of the skills were covered, as indicated in Table 8. The instructors observed the fellow performing the skill in the skills laboratory and used a structured observational checklist to record specific aspects of the skill. Using specific criteria for those behaviors required for competency in the skill, the instructor gave a score of competent or not competent. (See Appendix M for breast exam and venipuncture criteria and checklist.)

Analyses were done to assess the extent to which instructors rated student performance at the same or higher level of competence as the student did on her self-assessment. The results of these analyses, pooling all the data for all the skills validated, showed that the competence data obtained from student self-assessments were generally not inflated estimates of student ability. Instructors rated 80%

Table 8

Self-Rated Skills and Subskills Validated by Instructor Observation

	Skills	Number of fellows observed	Site
1.	Breast examination	26	Both
2.	Intravenous therapy		
	venipuncture	26	Both
3.	Tracheostomy care		
	dressings	15	Site 1
	suctioning	15	Site 1
4.	Cardiopulmonary assessment		
	heart	3	Site 2
	lungs	3	Site 2
5.	Protected environments		
	hand washing	3	Site 2
	reverse isolation	3	Site 2
6.	Relaxation techniques	2	Site 2
7.	Parenteral feeding		
	nosogastric tube insertion	1	Site 2
	hyperalimentation		
	dressings	2	Site 2
	feedings	2	Site 2
8.	Gastrointestinal assessment	-	--
9.	Ostomy care	-	--
10.	Wound care	-	--
	Total number of observations	101	

of the skills at the same or higher level of competence as did the students in their self-assessments.

Follow-up Outcome Evaluation (9 and 15 months)

The major issues and questions to be addressed are listed below. Results are presented later in this section under "Program outcome as reflected by postprogram activities of the fellows," beginning on page 139.

1. Did the fellows take jobs appropriate to the reason the program was developed?

2. What are the types of oncology-related activities they are performing in their postprogram employment situations, and what is the quality of these activities?

3. Are they acting, or being perceived, as a resource in areas consistent with program goals?

4. Are they participating in community or professional activities that might bring about change in oncology nursing (e.g., community teaching programs, professional committees, research)?

5. What are they producing in their work situations, and what is the quality of the products?

6. To what extent are they implementing what they learned?

7. Are there other benefits, or negative outcomes, to the fellows?

8. Are there benefits, or negative outcomes, to the employing agencies or the community?

9. What are the characteristics of the employing agencies, and was there any demonstrable effect of these characteristics on the nature of fellow achievements?

10. Did the fellows believe, in retrospect, that their experiences in the program were worthwhile?

11. Did the employing agencies believe, in retrospect, that the fellows' experiences in the program were of value to the agency?

The mechanisms for collecting the information to answer the above questions consisted of: (a) a series of structured interviews conducted at the fellow's place of employment by the evaluators in the 9th and 15th month following completion of the program, (b) a set of three protocols for evaluating products developed by the fellows at their postprogram places of employment after program completion, and (c) two questionnaires for determining agency characteristics, which were completed by heads of agencies and other staff at the fellows' places of employment. These instruments are described below.

Follow-up Interviews.

Development. Evaluators at one site developed a draft of the instrument, using input from both project staffs, NCI consultants, and from Dixon's oncology program questionnaire from Yale University (1980). Both project staffs critiqued the instruments and revisions were based on these comments.

Description. There were three instruments designed to assess different perspectives on outcome. They were: (a) Fellow Follow-up Form, (b) Supervisor/Colleague Follow-up Form, and (c) Head of Agency Follow-up Form. The rationale was that data would be obtained from the fellow about aspects that only the fellow could report (e.g., feelings of satisfaction, activities outside of the employing agencies, activities that supervisors might not be in a position to observe, etc.) Colleagues and immediate supervisors would report on activities they could observe--sometimes this would be the only source of information; at other times it would serve to corroborate fellow reports. Particularly, colleagues and supervisors would be able to provide performance evaluations and an assessment of the benefits or detriments of the fellow's participation in the program to the agency. Supervisors' judgments were considered to be more valid, because the fellows might have chosen advocates as the colleague to be interviewed rather than adversarial or neutral people. However, where supervisor judgments were unavailable or not based on direct observation of the fellow, colleague data were used.

Heads of agencies were interviewed for two reasons: (a) to obtain information about new oncology programs in progress or planned, and other agency characteristics that might have an effect on the fellow's implementation of learning; and (b) to obtain an assessment of benefits to the agency from this person's perspective.

Structured interviews were employed, making use of both multiple-choice and open-ended formats. Face-to-face interviews with respondents were conducted by the external evaluators. There were four interviewers in all--two from each program, each interviewer conducting site visits for about half of the fellows from that program. Data collection procedures used by the four interviewers were quite consistent. This reliability was due to: (a) the use of identical data collection instruments by all interviewers, (b) the extensive involvement of three of the interviewers in the development of the instruments, and (c) the closeness of communication between interviewers at the same program sites during the data-collection phase. The interview questions for each form are included in Appendix N.

Product Assessment Instruments.

Development. The evaluators developed the instruments with input from project staff and NCI consultants. These instruments included:

1. A structured interview protocol seeking information from the fellow about the effect of the program and of the fellow's employing agency on the development of the product, the intended audience of the product (type and number), and an assessment of the product's effectiveness.
2. A structured interview form for colleagues and supervisors seeking information about the extent to which the supervisor or colleague was involved in the development of the product and the supervisor/colleague's assessment of the effectiveness of the product.
3. An external evaluation form for evaluating the content and usefulness of the product.

The three protocols were used in the first round of visits and modifications were made as a result of that experience. The new protocols developed for the second round of visits did not collect any new information, only in a more easily usable format. All data from the first visits were preserved.

Description. The final field evaluation protocols and external evaluation form were multiple choice, objective formats. They are included in Appendix O. Field evaluation data were collected from the fellow, the fellow's supervisor, and at least one colleague. All the external evaluation was completed for both project sites by the registered nurse on the evaluation team, who used the judgment of content experts where she did not feel competent to make a judgment. A classification scheme for categorizing the products is given in Table 9.

Results

The results of the program evaluation are organized into the following major categories:

1. Preprogram characteristics of fellows
2. Process evaluation
3. Outcome (immediate postprogram and follow-up)
    a. Pre/postprogram assessment of knowledge, attitudes, and skills of the fellows
    b. Goals and competencies of the fellows
    c. Program outcome as reflected by postprogram activities of fellows
    d. Program outcome as reflected by postprogram product development by fellows
    e. Characteristics of employing agencies

Table 9

Classification of Products

Product classification	Category
Curriculum materials[a]	Continuing education/inservice degree offerings Patient education Public education
Nursing care materials	Nursing care plans Procedures/protocols/equipment specifications Standards Evaluations of care Needs assessments
Administration	Management plan/documentation Change proposals/projects Job clarification/evaluation
Consultation reports	None
Research materials	Plan or proposal Data collection tool Philosophical statement
Publications/presentations	Journal articles Book or book chapter Presentations or speeches

[a] Can also be classified by course outline or syllabus, course evaluation, audiovisual materials, needs assessment.

f. Overall summary evaluation by fellows and others

The general presentation strategy is to include detailed summary tables of relevant data with a narrative summary of the key points which appear in the tables. Detailed examination of the tables by the interested reader could reveal interesting, but infrequently occurring, events or outcomes. The narrative summaries do not dwell on, nor perhaps even cover, many of these; instead they stress key findings of each table. The results of analyses which focused on relationships among selected variables also are reported. However, these are not discussed in any detail, unless a significant relationship was found.

As mentioned in Section 3, the analysis data base consisted of the 26 fellows from Cohorts A and B. Five of the fellows were graduate students at the master's level immediately before the program, and four fellows were graduate students at the doctoral level throughout the postprogram follow-up period. Note that it was not appropriate to include fellows who were in a graduate student status immediately before or after the program in some analyses, due to the nature of the variables being analyzed. Also, there was a small amount of missing data for some analyses, due to nonresponse.

Preprogram Fellow Characteristics as Predictors

Fellow demographic characteristics have been summarized in Section 3. Additional analyses investigated the relationships between preprogram characteristics of the fellows and performance on the Knowledge, Attitude, and Skills measures. The preprogram characteristics consisted of basic nursing preparation (Diploma/AD vs BS), work background (education vs clinical), major goal for program, marital status, and number of children. Fellows with an education background showed a greater gain in the acquisition of nursing skills.

Other analyses investigated the relationship between work background and competency ratings and between competency ratings and performance on the Knowledge, Attitude, and Skills measures. These analyses showed that fellows with education backgrounds tended to have higher ratings as teachers (at debriefing) and curriculum developers (at follow-up). The analyses also showed significant correlations between skill acquisition and self-ratings on classroom teaching, curriculum development, and administration. This latter finding confirms the earlier results that showed larger gains in skill acquisition for educators, since those with higher teaching and administration ratings tended to be the fellows with education backgrounds.

Finally, the five demographic characteristics (educational background, work background, major goal, marital status, and number of children) were cross-tabulated with responses to questions assessing satisfaction with the program: "Would you recommend the program to a friend or colleague?" and "Would you attend the program again?" No significant relationship was found between the fellow characteristics and the responses to either question.

Process Evaluation

At the time of program completion (debriefing interview) and during follow-up visits, the fellows were asked an open-ended question to determine what they thought had been the most significant thing they had learned during the program. It was asked at both times in order to assess the impact of several months of on-the-job experiences on the fellows' perceptions. Table 10 shows the number of fellows mentioning particular content areas (the open-ended responses had been content analyzed). Fellows often gave more than one most significant learning; so, the total number of learnings mentioned exceeds the number of fellows. By far the most frequently mentioned area was curriculum development; 54% of judged value of the content related to clinical knowledge of cancer took place during the 15 months of on-the-job experience between the end of the program and the last follow-up. Twenty-three percent reported that the clinical knowledge of cancer content was a significant learning for them at program

Table 10

Fellows' Most Significant Learning

Most significant learning	Response date Debriefing[a]		Follow-up[b]	
Curriculum development, implementation, evaluation	14	(54%)	13	(50%)
Clinical knowledge of cancer	6	(23%)	11	(42%)
Specific clinical experience	5	(19%)	9	(35%)
Assessment, patient care skills	4	(15%)	4	(15%)
Contacts, networking	3	(12%)	1	(4%)
Interpersonal skills	2	(8%)	2	(8%)
Leadership skills	1	(4%)	1	(4%)
Management skills	1	(4%)	4	(15%)
Consultation skills	1	(4%)	3	(12%)
Planned change	1	(4%)	2	(8%)
Research skills	1	(4%)	2	(8%)
Communication regarding presentation	0	(0%)	1	(4%)
Personal survival skills	0	(0%)	1	(4%)

[a] Percent based on 26 fellows, 39 total responses. [b] Percent based on 26 fellows, 54 total responses for follow-up visits.

the fellows mentioned it at debriefing and 50% at the time of the last follow-up. Included here were comments related to writing objectives, curriculum planning, evaluation, teaching strategies, oncology resources for curriculum development and use of audiovisual media. An interesting upward shift in the completion; 42% felt that way after 15 months on the job. The fellows became more aware of the value to them as they went about performing the duties of their postprogram position. The same upward shift took place regarding the value of their clinical experience in the program; 19% at postprogram debriefing and 35% at 15-month follow-up. These experiences included preceptors, hospice, home care experiences, chemotherapy, and cancer screening.

While Table 10 presented information about what the most significant content areas were, Table 11 presents information from the fellows about what were the most helpful teaching strategies. The most frequently mentioned teaching strategy was clinical experience, followed in order by teaching experience and education courses.

At postprogram debriefing and at the 15-month follow-up, the fellows were asked what they would have liked to have learned that they did not during the program (this included learning more of something already covered). Table 12 shows that the two top areas at both the debriefing and the follow-up were "more specific oncology content" and "more clinical practice." Both of these showed sizable increases in the number of fellows mentioning them between the end of the program debriefing and the 15-month follow-up (see Table 12). After 15 months on the job, 54% of the fellows would have liked more specific oncology content in the program, and 38%

Table 11

How Most Significant Learning Was Obtained

How learned	Debriefing response[a]
Clinical experience	9 (35%)
Teaching experience	7 (27%)
Education courses	6 (23%)
Oncology courses	3 (12%)
Seminars, small groups	5 (20%)
Lectures	1 (4%)
Reading lists	1 (4%)
Self-reliance	3 (12%)
Contact with MDs, nurses, fellows	2 (8%)
Personal experience with faculty	1 (4%)

[a] Percent based on 26 fellows. Total of 38 responses.

mentioned they would have liked more clinical practice while in the program. Some of specific areas mentioned with respect to oncology content were various types of cancer (pediatric, gynecological, lymphoma), epidemiology, immunology, pain, nutrition, treatment modalities, rehabilitation, and death and dying). Clinical practice content areas mentioned included: (a) more time in general, (b) more hands-on care, (c) more practice in an acute setting, (d) more radiation and chemotherapy experience, and (e) more symptom management.

Table 12

What Fellows Would Like to Have Learned

Like to have learned	Response date Debriefing[a]	 Follow-up[b]
More specific oncology content	8 (31%)	14 (54%)
More clinical practice	7 (27%)	10 (38%)
More on administration	3 (12%)	3 (12%)
Consultation skills, experience	2 (8%)	3 (12%)
More on research	2 (8%)	4 (15%)
Counseling skills	2 (8%)	1 (4%)
More on evaluation	2 (8%)	0 (0%)
More on education	1 (4%)	1 (4%)
Coping with stress	1 (4%)	0 (0%)
No suggestions	4 (15%)	3 (12%)

[a] Percent based on 26 fellows, 32 total responses.

[b] Percent based on 26 fellows, 39 total responses for follow-up visits.

Several areas related to program implementation were assessed by the items included in the fellows' postprogram debriefings. Following are summaries of responses to a number of these items.

1. Impressions of the overall quality of the faculty teaching the program were generally good, with 70% judging the faculty good or excellent. The faculty was viewed even in a better light with respect to providing extracurricular

support (nonprogram, personal-type assistance with family matters, housing, transportation), with 95% of the fellows judging them good or excellent. Preceptored experience was favorably viewed, with 73% of the fellows indicating they had satisfactory experiences.

2. For the most part, the fellows reported they had the opportunity to provide feedback to the faculty during the program (80% said they had the opportunity most or all of the time).

3. Impressions of the evaluation tools used during the program, which included course evaluation and assessment instruments and program evaluation instruments, were generally less than enthusiastic. Fifty percent thought they were fair, and 23% thought they were poor. One of the reasons for this feeling was that the pretests were not used in the standard way--to guide learning activities. In fact, program evaluation considerations prohibited sharing the results of the pretests with the fellows, a situation that caused some dissatisfaction.

4. From the overall program perspective, the fellows believed that the program delivered what had been promised in the advance program descriptions. Thirty-one percent thought that the program met all the objectives stated in the written materials; 65% felt that most had been met.

Outcome (Immediate Postprogram and Follow-up)

Fellows' pre/postprogram employment. Table 13 summarizes the distribution of the fellows by pre/postprogram employment position. About 75% of all of the fellows had come to the program from an educator position. The remainder had come about equally from clinical positions (20%) or graduate-student status (15%). At the time of the last follow-up visit, 11 (42%) were employed at the same agency as their preprogram employment and 15 (58%) had gone to a different agency. Thus, over half of the program's fellows had moved on to new positions following program completion. One of the fellows who was a graduate student at the last follow-up visit has since accepted a faculty position. Although she could not be included in the analysis as a faculty member, it should be noted that her current primary duty is to develop new oncology programs.

Tables 14 and 15 summarize the characteristics of pre/postprogram employing agencies. As shown in Table 14, there was a pre/post shift toward more privately controlled agencies and direct care agencies. The postprogram agencies also had more oncology facilities and more planned oncology courses. Agency climate for change was essentially the same for both pre/postprogram agencies (Table 15). The dimensions used to measure climate for change are shown in this table.

Table 13

Fellows' Pre/Postprogram Employment

		Position at 15-month follow-up			
Position	Preprogram	Educator	Clin.[a]	Student[b]	Admin.[c]
Educator	17 (65%)	10 (38%)	4 (15%)	1 (4%)	2 (8%)
Clinician	4 (15%)	0 (0%)	4 (15%)	1 (4%)	0 (0%)
Grad student[c]	5 (19%)	0 (0%)	3 (12%)	2 (8%)	0 (0%)
Totals	26 (100%)	10 (38%)	10 (38%)	4 (15%)	2 (8%)

[a] 1 staff nurse, 2 home health nurses, 7 clinical nurse specialists in oncology. [b] 1 educational administrator, 1 nursing service administrator. [c] At pre, 4 master's students and 1 doctoral student; at post, all were doctoral students.

The score for an agency was determined by calculating the median response of all the people completing the agency climate instrument at that agency. On the average, the agencies were above the midpoint on all the dimensions measured by this instrument.

Pre/postknowledge, attitudes, and skills of the fellows. As discussed in an earlier section, the Knowledge Test assessed knowledge in three areas: clinical practice, education, and other roles. Results are presented in Table 16 and Figure 5. For all three parts and the total, significant

Table 14

Summary of Agency Demographics

Characteristic		Pre[a]	Post[b]
Control	Public	11/18 = 61%	10/23 = 44%
	Private	7/18 = 39%	13/23 = 56%
Type	Education	14/18 = 78%	11/23 = 48%
	Direct care	3/18 = 17%	9/23 = 39%
	Both	1/18 = 6%	3/23 = 13%
Programs	Basic nursing prep	14/15 = 93%	11/14 = 79%
	Master's in nursing	5/15 = 33%	4/14 = 29%
	Post-master's	3/15 = 20%	2/14 = 14%
	Continuing education	9/15 = 60%	7/14 = 50%
	In-service (teaching)	5/15 = 33%	6/14 = 43%
	In-service (nursing)	2/15 = 14%	4/13 = 31%
Oncology courses		6/15 = 40%	5/14 = 36%
Oncology courses planned		2/15 = 13%	4/14 = 29%
Oncology facilities		1/ 3 = 33%	10/12 = 83%
Oncology facilities planned		2/ 3 = 67%	5/12 = 42%
Principal type of care	Inpatient	1/ 4 = 25%	9/12 = 75%
	Home care	3/ 4 = 74%	3/12 = 25%
Accredited		3/ 3 = 100%	11/11 = 100%
Administrative support for new education programs	Moderate	2/15 = 13%	2/14 = 14%
	Considerable	13/15 = 87%	12/14 = 86%
Administrative support for new client care programs	Moderate	0/ 3 = 0%	4/12 = 33%
	Considerable	3/ 3 = 100%	8/12 = 67%

[a] Pre based on total possible of 21 agencies (21 fellows; excludes 5 graduate students). [b] Post based on total possible of 27 agencies (22 fellows excludes 4 graduate students).

Table 15

Summary of Agency Climate

		n	Mean	Medn	SD	Min	Max	Poss. Lo	Poss. Hi
Readiness for change	Pre[a]	20	3.7	3.8	.5	2.5	4.6	1	6
	Post[b]	25	3.8	3.8	.6	2.3	4.8		
Past experience	Pre	20	3.7	3.8	.6	2.5	4.8	1	6
	Post	25	3.6	3.8	.8	1.0	4.8		
Decision making	Pre	25	3.0	3.3	.9	1.0	4.3	1	6
	Post	25	3.1	3.2	.8	1.1	4.3		
Communication	Pre	20	3.8	4.0	.8	2.0	4.9	1	6
	Post	25	3.9	4.0	.7	2.3	4.9		
Problem solving	Pre	20	3.6	3.8	.7	2.0	4.6	1	6
	Post	25	3.7	3.8	.7	1.8	4.6		
Total for above	Pre	20	17.8	18.4	3.1	12.0	22.5	5	30
	Post	25	18.0	18.6	3.3	9.8	22.5		
Need for change	Pre	20	2.2	2.1	.4	1.5	3.0	1	4
	Post	25	2.3	2.2	.4	1.5	3.0		
Division of labor	Pre	20	3.0	3.0	.4	2.3	4.0	1	4
	Post	25	2.9	2.8	.5	2.0	3.7		
Environmental facilitators	Pre	20	2.3	2.2	.3	2.0	2.9	1	4
	Post	25	2.3	2.3	.3	1.8	2.9		

[a] Based on 21 agencies (21 fellows; excludes 5 graduate students). [b] Based on 27 agencies (22 fellows; excludes 4 graduate students).

Table 16

Results of Knowledge Test

				% Score			
	Items	Reliability[a]		Pre	Post	Diff	*p*[b]
Clinician	68	.83	Mean	61	72	+11	<.001
			SD	12	10		
			Range	29-79	51-90		
Educator	36	.59	Mean	68	76	+ 8	<.001
			SD	10	9		
			Range	42-83	58-92		
Other roles	47	.62	Mean	59	66	+ 7	<.001
			SD	11	7		
			Range	38-76	51-77		
Total test	151	.87	Mean	63	71	+ 8	<.001
			SD	9	7		
			Range	45-79	55-82		

[a] Cronbach's alpha based on pooled pre/post data. [b] One-tailed probability level based on paired *t* test (*n* = 26, *df* = 25).

the resulting clusters were examined. The results were difficult to interpret because of the small number of cases. Interpretations provided by Clarke Associates and by Josephine Craytor, a consultant to NCI, suggest that on the pretest, the Ideal Patient was preceived as very much like the Ideal Cancer Nurse, a person one would not consider in need of care or support. On posttest, perceptions of the Ideal Patient had moved away from the Ideal Nurse and somewhat

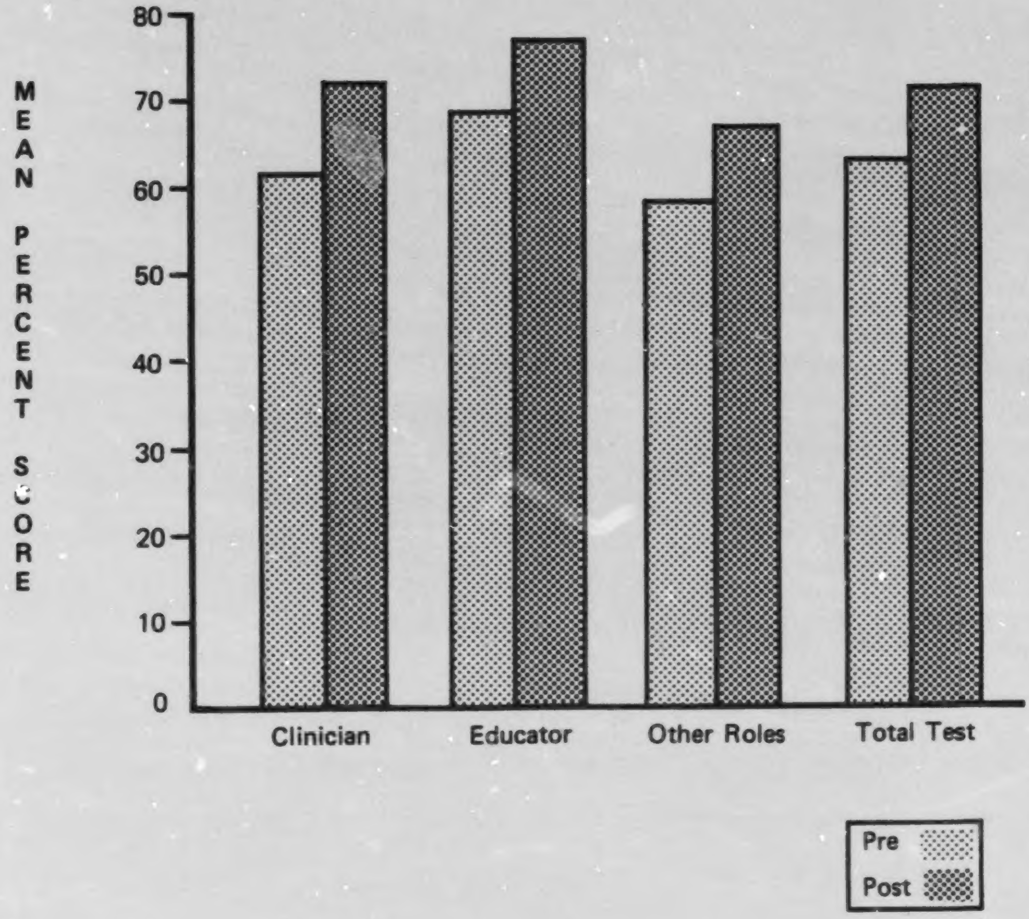

Figure 5. Results of Knowledge Test.

improvement in the mean scores was noted between pretest and posttest. This is an important finding in and of itself, even though the overall evaluation design of the program stresses longer term assessment of program impact. What is known at this point is that the fellows did acquire some additional knowledge during the program which was reflected in their pre/post gains on the Knowledge Test. How they put this knowledge to work will be described in the analyses to be treated later.

Attitude modification did not take place to the same extent that knowledge did. Results for the Attitude Questionnaire are shown in Table 17 and Figure 6. None of the part scores nor the total score was significantly different between pre/postprogram administrations. Attitude modification was thought to be a much more subtle program procedure; and to the extent it was measured accurately by the instrument used, did not occur.

In addition to the attitude instrument dicussed before, the AVA was administered to the fellows before and after the program. The results were analyzed by Clarke Associates and closer to the Typical Patient and Typical Cancer Patient. This may mean the nurses have changed their concepts of themselves and can tolerate an Ideal Patient perception that is nearer reality.

Table 17

Results of Attitude Questionnaire

				% Score			
	Items	Reliability[a]		Pre	Post	Diff	p[b]
Clinician	61	.72	Mean	301	303	+2	.54
			SD	21	18		
			Range	252-334	254-330		
Educator	36	.54	Mean	176	174	-2	.31
			SD	12	12		
			Range	152-199	149-200		
Other roles	53	.75	Mean	260	261	+1	.74
			SD	16	21		
			Range	218-291	204-296		
Total test	150	.87	Mean	737	738	+1	.91
			SD	43	44		
			Range	622-822	628-798		

[a] Cronbach's alpha based on pooled pre/post data. [b] One-tailed probability level based on paired t test ($n = 26$, $df = 25$).

While the cluster around the True Self is very small on the pretest and cannot carry much weight, it is a grouping around a very negative self-image which is much like the typical patient, helpless and incapable of making decisions. This cluster disappears on the posttest, an indication that the fellows no longer have these low self-perceptions.

No change occurred in the stereotyped impression of the Cancer patient between pre/posttest. It may be that the group of fellows, having already selected cancer as a field

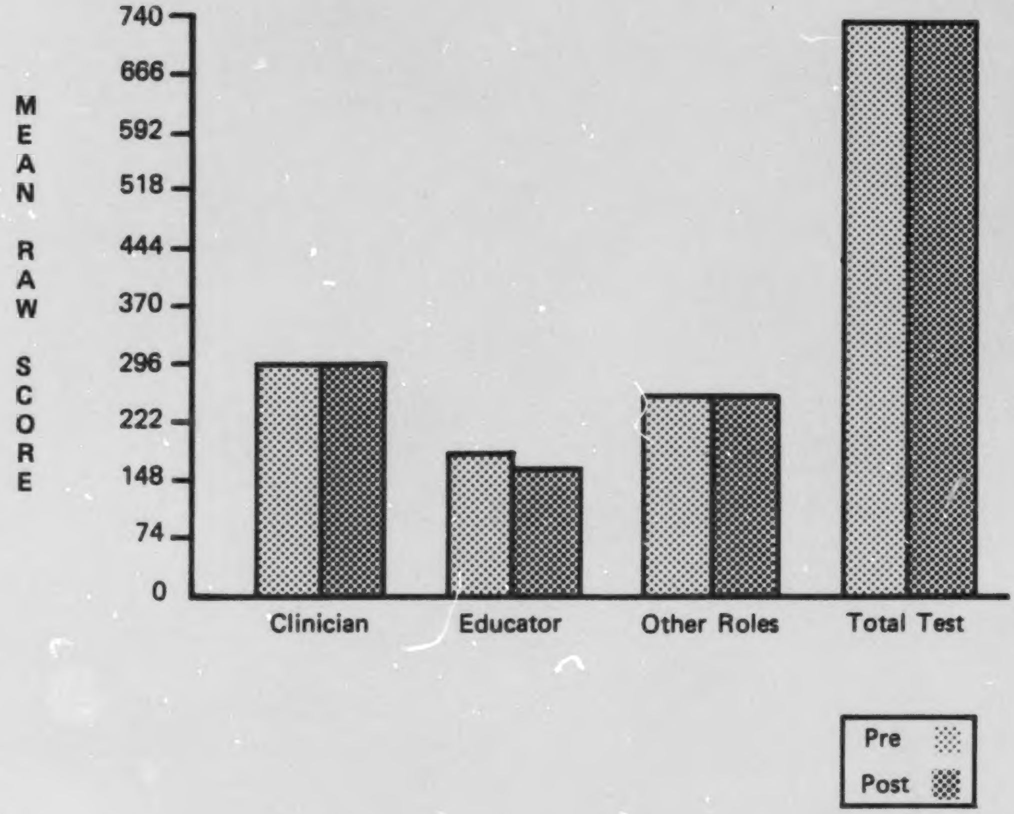

Figure 6. Results of Attitude Questionnaire.

of concentration, saw the Cancer Patient as their usual patient.

There was significant improvement in pre/post self-ratings of skills by the fellows, as shown in Table 18. Relaxation techniques, cardiopulmonary assessment, and IV therapy all showed significant improvement in competencies as reflected by the self-ratings. In addition, some portions of other skill areas also showed improvement, e.g., hyperalimentation under parenteral feedings. Other improvements may be identified by an examination of the table. As indicated earlier, instructor validation of the preprogram, self-reported skills of the fellows showed that the fellows were, if anything, conservative in their self-appraisals.

Goals and competencies of the fellows. Almost all of the fellows came to the program wishing to improve their functioning as educators and as clinicians. A little less than half of them reported goals related to research. As Table 19 shows, of those having educator goals, 96% reported at the time of the debriefing that they had accomplished "most" or more of what they had wanted from the program. Somewhat fewer accomplished "most" or more of what they wanted in the clinical (79%) and research areas (66%). Of the relatively few fellows who had consultant role goals and administration goals, almost all believed they accomplished "most" or more of what they wanted.

Table 18

Results of Skills Self-Inventory

Skill	n (%) Competent		p^a
	Pre	Post	
Relaxation techniques	8 (31%)	16 (62%)	.03
Cardiopulmonary assessment			
Heart	12 (46%)	19 (73%)	<.01
Lungs	12 (46%)	24 (92%)	<.01
Gastrointestinal assessment			
Oral cavity	17 (65%)	26 (100%)	<.01
Abdomen	14 (54%)	21 (81%)	<.01
Rectum	9 (35%)	14 (54%)	ns
Breast exam	21 (81%)	25 (96%)	ns
Ostomy care			
Skin	18 (31%)	21 (81%)	ns
Bags/appliances	17 (65%)	22 (85%)	.03
Elimination/regulation	14 (54%)	19 (73%)	.03
IV therapy			
Venipuncture	14 (54%)	24 (92%)	<.01
Heparin locks	11 (42%)	24 (92%)	<.01
Hickman catheter	3 (12%)	12 (46%)	<.01
Parenteral feedings			
Nasogastric tube			
Insertion	18 (31%)	22 (85%)	ns
Feeding	23 (88%)	26 (100%)	ns
Hyperalimentation			
Dressings	11 (42%)	23 (88%)	<.01
Feedings	17 (65%)	24 (92%)	.02
Gastrojejunostomy	22 (85%)	23 (88%)	ns
Tracheostomy care			
Dressings	21 (81%)	25 (96%)	ns
Suctioning	20 (77%)	25 (96%)	.03
Changing tubes	11 (42%)	19 (73%)	.01
Isolation			
Handwashing	26 (100%)	25 (96%)	ns
Reverse isolation	22 (85%)	25 (96%)	ns
Wound care			
Dressing changes	20 (77%)	25 (96%)	ns
Sterile technique	20 (77%)	25 (96%)	ns
Skin care	20 (77%)	25 (96%)	ns

[a] One-tailed probability based on McNemar test (n = 26).

Table 19

Attainment of Fellows' Goals for Program

Response at debriefing	Area for Goal -- n (%)[a]				
	Clin	Educ	Res.	Admin.	Cons
Had as A GOAL	23 (88%)	21 (81%)	12 (46%)	6 (23%)	6 (23%)
Accomplished:					
EXACTLY what wanted	8 (35%)	6 (29%)	2 (17%)	2 (33%)	4 (66%)
ALMOST ALL of what wanted	8 (35%)	8 (38%)	1 (8%)	0 (0%)	1 (17%)
MOST of what wanted	2 (9%)	6 (29%)	5 (41%)	3 (50%)	1 (17%)
a LITTLE of what wanted	5 (21%)	1 (4%)	2 (17%)	0 (0%)	0 (0%)
NONE of what wanted	0 (0%)	0 (0%)	2 (17%)	1 (17%)	0 (0%)

[a] Percent for "Had as A GOAL" based on 26 fellows. Percent for "Accomplished" based on number who had that area as a goal (e.g., for Clin, percent based on 23 fellows).

Self-ratings of fellows' competencies in the major areas related to program content were obtained at the end of the program during the debriefing interview and again during the follow-up visits. Ratings were also obtained about the fellow's performance in these areas from supervisors and colleagues during the follow-up visits. A comparison of these ratings is shown in Table 20. At the 15-month follow-up, mean self-ratings and supervisory ratings in education role and in clinical role are "above average" or higher. The fellows' self-ratings in the administration, research, and consulting areas are somewhat lower than their perceptions of their competencies in education and clinical.

In general, supervisor ratings of fellow performance are somewhat higher than the fellows' self-ratings. Thus, the fellows' self-ratings appear to be conservative.

The fellows were asked about long-term (3-5 year) plans both at the time of the program completion (debriefing) and during the follow-up visits. Table 21 summarizes the fellows' responses at both times. Fellows could and did state more than one goal, so the totals are greater than 100%. About 25% of the fellows at debriefing mentioned that their 3 to 5-year plans included teaching at the graduate level. This percentage dropped slightly at the follow-up. Teaching at the undergraduate level was also in about 25% of the fellows' plans, both at program end and at follow-up. Clinical practice (unspecified) was mentioned by about 25% of the fellows at debriefing, and dropped slightly during follow-up. By follow-up, 15% of the fellows were still including research in their 3 to 5-year plans. What is interesting and significant from the point of program evaluation is that almost all of the plans were oncology related (96%) and that

Table 20

Mean Ratings of Fellows' Competencies by Fellows and by Supervisors/Colleagues

Area	Self-rating[a] n	Post	15 mos.	Ratings by job[b] n	Self	S/C
Clinical	26	4.2	4.3	26	4.2	4.3
Education[c]		4.1				
Classroom teaching	26	-	4.0	25	4.1	4.3
Clinical supervision	26	-	4.3	24	4.4	4.4
Curriculum development	25	-	3.9	22	4.0	4.1
Administration	24	3.3	3.5	23	3.3	4.0[d]
Research	25	3.2	3.3	15	3.3	3.8[d]
Consulting	25	3.6	3.7	23	3.6	4.1[d]

[a] Fellows' self-ratings based on all 26 fellows. Some fellows did not rate themselves because a particular skill was not part of their position. [b] Fellows' self-ratings and ratings by Supervisor/Colleagues for each postprogram job based on 22 fellows (total of 27 jobs), who were not students postprogram (see footnote a on missing data). [c] Global rating only at postprogram. [d] Supervisor/Colleague mean significantly higher ($p = <.05$) than self-rating mean, based on paired *t* test. Scale: 1 = definitely deficient, 2 = below average, 3 = average, 4 = above average, 5 = definitely outstanding.

almost all (96%) of the fellows believed that the program would help them to achieve their plans.

Table 21

Fellows' 3 to 5-Year Plans

Plans	Debriefing[a]	Follow-up[a]
Teaching:		
Graduate level	7 (27%)	5 (19%)
Undergraduate level	6 (23%)	6 (23%)
C E, unspecified	2 (8%)	1 (4%)
Clinical practice, unspecified	7 (27%)	5 (19%)
Oncology CNS	2 (8%)	3 (12%)
Joint teaching - clinical	3 (12%)	1 (4%)
Nursing service administration	0 (0%)	2 (8%)
Don't know	2 (8%)	4 (15%)
Other professional activities:		
Research	6 (23%)	4 (15%)
Consultation	5 (19%)	1 (4%)
Finish doctorate	3 (12%)	2 (8%)
Publishing articles, writing	1 (4%)	0 (0%)
Oncology related?	24 (96%)[b]	22 (96%)[c]
Program help achieve plans?	22 (96%)[c]	

[a] Percent based on 26 fellows, unless noted. [b] Percent based on 25 fellows. [c] Percent based on 23 fellows.

Program outcome as reflected by postprogram activities of fellows. While the overall distribution of time spent by the fellows on the job did not appear to shift among education, clinical, and administration duties between pre/postprogram job activities, over half of the fellows (63%) indicated they were spending more job time in oncology activities related to education following program completion. Also, 44% were spending more time in oncology patient care.

Overall postprogram job satisfaction was quite high, with 30% of the fellows being very satisfied and 56% being satisfied. Only four of the fellows were not happy with their postprogram jobs. Looking at specific aspects mentioned by the fellows as contributing to their satisfaction, the major aspect was clinical patient care, followed by teaching students. Relationships with colleagues and opportunity to make changes were also significant satisfiers. The most frequently mentioned negative aspect of their jobs was job pressure, which was mentioned by almost 40% of the fellows. Agency characteristics and job conditions were the next most frequently mentioned least satisfying aspects of the job. More details are provided in Table 22. Additional analyses revealed no significant relationships between agency characteristics and job satisfaction.

Table 22

Fellows' Job Satisfaction

	n	(%)[a]
Overall job satisfaction:		
Very satisfied	8	(30%)
Satisfied	15	(56%)
Dissatisfied	4	(15%)
Most satisfying aspects of job:		
Clinical, patient care	14	(54%)
Teaching students	14	(54%)
Relationship with colleagues	9	(35%)
Opportunity to make changes	8	(31%)
Agency characteristics	3	(12%)
Autonomy of position	3	(12%)
Opportunity to do research	2	(8%)
Clinical consulting	2	(8%)
(Total responses = 55)		
Least satisfying aspects of job:		
Job pressures	12	(44%)
Agency characteristics	7	(26%)
Job conditions	4	(15%)
Little feedback	3	(11%)
Poor relationship with colleagues	3	(11%)
Lack of administrative support	2	(7%)
Being underused	1	(4%)
Watching patients die	1	(4%)
(Total reponses = 33)		

[a] Based on 27 agencies (22 fellows; excludes 4 graduate students).

Educational activities. The types of educational activities engaged in by the fellows at their postprogram jobs are shown in Table 23. Almost all of the fellows (91%) were involved in curriculum development activities, with almost as many engaged in conducting education needs assessment and evaluation activities.

Table 23

Fellows' Education Activities at Agencies

Activity	n	(%)[a]
Curriculum development activities?	20	(91%)
Education needs assessment?	19	(86%)
Evaluation activities	19	(86%)
Students seek oncology nursing?	11	(73%)[b]
Students seek further oncology education?	9	(64%)[b]
Preceptorship involving oncology nursing?	7	(32%)
Taught other health care workers:		
CE/inservice	18	(82%)
Rounds	11	(50%)
College courses	9	(41%)
Tumor boards	8	(36%)

[a] Based on 22 fellows (excludes 4 graduate students) unless noted. [b] Percent based on 15 fellows who had students.

One possible indicator of the extent to which the fellows were having an influence on others is suggested by the percentage of fellows whose students were seeking further education in oncology (64%) and seeking oncology nursing positions (73%).

The fellows instructed other health care workers in several settings. Table 23 shows the type of instruction and the number of fellows performing that type of instruction. Almost all of the fellows (82%) had taught CE/in-service-type courses to other professionals. About half of the fellows had taught college courses to other professionals since returning to their postprogram position. Also about half had instructed during client rounds.

Table 24 summarizes the teaching strategies used by the fellows on their postprogram jobs. Such strategies, their use, and the effectiveness with which they were used reflect on present and future program content related to the education component. The table shows that the fellows made use of a wide variety of techniques with clinical demonstration, small group instruction, case material presentation, process teaching, lecture, and audiovisual aids being the major techniques used by almost all the fellows. Ratings by supervisors suggest that the fellows were quite successful in using the strategies.

Table 24

Teaching Strategies Used and Performance Ratings

		Median ratings[a]		Rating = 3	
Teaching strategies	Used?[a]	Fel	Sup/ coll	Fel	Sup/ coll
Clinical demonstration	22 (100%)	2.9	2.9	63%	79%
Lecture	22 (100%)	2.8	2.9	60%	89%
Audiovisual aids	22 (100%)	2.5	2.9	41%	65%
Case material presentation	21 (95%)	2.7	2.9	46%	63%
Process teaching	20 (91%)	2.5	2.8	44%	61%
Small group	19 (87%)	2.9	2.9	68%	80%
Hands-on care	18 (82%)	2.8	2.9	60%	72%
Learning guides	18 (82%)	2.2	2.9	26%	68%
Preceptoring	8 (37%)	2.8	2.9	60%	67%
Other	5 (23%)	1.5	2.3	20%	50%

[a] 3 = high success, 2 = moderate success, 1 = low success.
[b] Percent based on 22 fellows (excludes 4 graduate students).

Clinical activities. The major activities engaged in by the fellows during their clinical activities are shown in Table 25. Almost all of the fellows had served as a patient advocate, representing the patient's needs and interests in dealing with other staff and agencies. Almost all had also used other resources in the clinical setting to meet the needs of the patients (e.g., social workers). About half of the fellows had been involved with clinical needs assessment and about half with revising or helping others to revise care standards. Actual development or helping develop care standards (as opposed to revision of existing ones) was done by 55% of the fellows. In addition to engaging in the activities listed, 77% of the fellows indicated that they had performed other clinical activities, including volunteering in hospice, acting as hospice coordinator, attending patient care coordination meetings, developing guidelines for admission of patients to the unit, developing protocols for morphine drip and cytoxin rescue, and developing job aids for flagging new drugs and doses.

The fellows had worked with a wide variety of the patient types; these are shown in Table 26. Almost all of the fellows had worked with dying patients and patients undergoing chemotherary. Breast cancer and lung cancer patients were cared for by about 75% of the fellows. The least common work experience included working with pediatric

Table 25

Fellows' Clinical Activities at Agencies

Activity	n	(%)[a]
Acted as a patient advocate?	19	(86%)
Use other resources, e.g., social worker?	18	(82%)
Revised/help revise care standards?	12	(55%)
Clinical needs assessment?	10	(46%)
Developed/help develop care standards?	9	(41%)
Participated in client initiated activity?	7	(32%)
Other?	17	(77%)

[a] Based on 22 fellows (excludes 4 graduate students).

patients and working with patients having radioactive substance implantations.

Administrative activities. Administrative activities frequently involved the use of various management control devices. Most of the fellows made use of simple devices such as schedules or calendars, posted notes, and reminders. About 25% of the fellows made use of a specific device such as timeline charts or milestone checklists. Half of the fellows reported that the program had helped them in developing, or to further develop, their administrative skills;

Table 26

Types of Patients Cared for

	n	(%)[a]
Types of cancer:		
Chemotherapy	19	(86%)
Breast cancer	18	(82%)
Lung cancer	18	(82%)
Rectum or colon cancer	18	(82%)
Brain tumor	17	(77%)
Leukemia or lymphoma	16	(73%)
Head or neck cancer	15	(68%)
Gyn cancer	13	(59%)
Skin cancer	10	(46%)
Pediatric	2	(9%)
Phases of illness:		
Dying	23	(89%)
Prep for discharge	19	(73%)
Treatment modality:		
Hyperalimentation	18	(69%)
Radiation therapy	17	(65%)
Postop disfiguring	16	(62%)
Preop disfiguring	8	(31%)
Radioactive subs in body	4	(15%)
Other	10	(39%)

[a] Based on 22 fellows (excludes 4 graduate students).

additional analyses showed that these fellows rated themselves higher on administration skills and tended to use management devices more often.

Research activities. While the term research activities was interpreted in a very broad sense, including basic patient data collection, over half of the fellows stated that they had been involved with research since completing the program, and about the same number said that the program had helped them develop these skills. Almost all of the fellows (92%) reported that they actively kept up with oncology literature.

Professional and community activities. One goal of the program was to educate the fellows so that they could serve as a consultant to others e.g., a change role. One index of how the fellows were carrying out this role would be reflected by the fellows' professional and community activities following program completion. Seventy-seven percent of the fellows were serving, or had served, on professional committees since completing the program. This not only represents activities associated with the change role, but also reflects the extent to which the fellows are being viewed as resources within their professional community. Over half of the fellows had been involved in community and school educational programs.

The fellows as a group appeared to be active in their professional development activities, with almost all of them (92%) having attended a continuing education course during the 6 months preceeding the last follow-up visit. About

70% of the fellows planned to continue their professional development, and about 40% had plans for further education in oncology.

Risk factor awareness and modification. Participation in the program was also thought of as a means of bringing about an increased awareness of personal risk factors associated with cancer and the possible modification of some of these factors by the fellows. While the fellows were already aware of many of these factors, 68% did state during the debriefing interview that they had become more aware of the risk factors and had taken steps to modify their own behavior to reduce personal risk. The most frequently mentioned risk factor of which they were more aware and had modified their behavior was diet (44%). An additional 28% were more aware of dietary risks, but had not yet modified their behavior.

Increase in fellows' salaries. Excluding fellows who were graduate students before or after the program, 13 fellows returned to their previous jobs. Eight (62%) of these fellows received a salary increase. Ten fellows went to new jobs at some time after the program, and seven (70%) of these fellows received salary increases. Additional analyses revealed that fellow characteristics (including postprogram test performance) were not related to salary increase.

Value of program participation to agencies. Supervisors/colleagues and agency heads were asked during the follow-up visits to rate the value of the fellow's participation in the program to their agency. Their responses were recorded on a scale from 1 to 5 with:

1 = not at all valuable
3 = moderately valuable
5 = very valuable.

Table 27 shows the distribution of the responses by supervisors/colleagues and agency heads. The mean supervisor/colleauge response was 4.7 and the mean agency head response was 4.3. The correlation between the two sets of ratings was $\underline{r} = .49$ ($\underline{p} < .01$). Because it was often difficult for individuals to judge the value of the program when the fellows had not worked for their agency before attending the program, this part of the analysis was restricted to the data coming from agencies in which the fellows worked in the same agency both before and after the program. Additional analyses showed no significant relationships between agency characteristics and value to the agency. Similarly, there were no significant relationships between fellow characteristics (including postprogram test performance) and value to the agency. In addition, value to the agency was not related to the fellows' increase in salary.

Table 27

Value of Fellows' Program Participation to Agency

		Rater[a]	
	Rating	Supv/coll	Agency head
Very valuable	5	9 (69%)	5 (39%)
	4.5	2 (15%)	2 (15%)
	4	1 (8%)	3 (23%)
	3.5	1 (8%)	1 (8%)
Moderately valuable	3	0 (0%)	2 (15%)
	2	0 (0%)	0 (0%)
Not at all valuable	1	0 (0%)	0 (0%)
	Mean	4.7[b]	4.3
	SD	.5	.7

[a] Percent based on 13 fellows who returned to same agencies.

[b] Significantly higher ($p < .05$) than Agency Head mean based on paired *t* test. Pearson *r* between ratings = .49 ($p < .05$)

The fellow as a resource person. Eighty-six percent of the agency heads judged that the fellow was seen as a resource, and for those agencies which had developed new oncology programs, 72% of the agency heads said that the fellow's participation in the program had some influence on the development of these new programs. Ninety-six percent of the fellows viewed themselves as resource persons and most (77%)

indicated that they were sought out as a resource several times a week or more frequently. Nineteen percent indicated they were sought out as a resource a few times a month.

The fellow as a change agent. Based on postprogram performance, there were no unsuccessful fellows. All but one fellow produced some products (discussed in the next section) related to their experience in the program and all cited personal and professional benefits. However, there was a range of successful performance as a change agent, which was related to several factors, among them motivation, personal or family problems, degree of support from agency, and acceptance by coworkers. In the interest of anonymity, the specific circumstances cannot be detailed, but the examples shown in Table 28 serve to illustrate the facilitating and inhibiting factors.

Opportunity to apply program experiences. Twenty-seven percent of the fellows reported that they were able to apply fully what they had learned in the program. When asked for reasons for not fully applying what learned, the three major reasons were: restrictive conditions at work, job not all oncology related, and not applying all roles in present position.

Table 28

Success as a Change Agent as Related to Facilitating and Inhibiting Factors

Examples	Facilitating or inhibiting factors
1. Highly successful change agents.	
a. This fellow produced more than 20 products in her role as clinical nurse specialist, mostly related to inservice education. She was avidly sought by the director of the agency to help plan and implement new programs, e.g., a new hospice program, a change of unit location.	High motivation. High degree of supsupport from agency. Good relationship with peers, including physicians.
b. Other highly successful change agents included two clinicians and one educator who produced 17-18 products each.	
2. Moderately successful change agents.	
a. These fellows incorporated their learning into their teaching jobs; the range of number of products was 1-11; they were not highly innovative people. On the strength of their experience in the program, their department heads had recommended them to universitywide councils and other groups, where they were more followers than leaders.	Lower motivation. Personal health and family problems. Moderate degree of support from agency. Short amount of time at agency.

Table 28 (continued)

Examples	Facilitating or inhibiting factors
3. Low degree of success as change agent.	
a. These fellows, serving in both clinical and educational positions, were highly motivated and bright, but were not given the freedom to be innovative by their head nurse or supervisor, or were not accepted by their peers. The number of products they produced ranged from 0-8 and they tended to be products for which there was an expressed need, such as a patient assessment scale or a brief inservice review of a patient care activity.	High motivation. Low degree of support from agency. Nonacceptance by peers. Short amount of time at agency. Job not clearly defined.

Positive and negative outcomes for agency. In addition to the benefits to the agency discussed previously which resulted from the fellows' job-related activities, supervisors/colleagues and agency heads were asked to discuss other positive and negative outcomes for the agency of the fellow's participations in the programs. The major positive outcomes are shown in Table 29. The most frequently mentioned were:

1. Fellow was a resource to staff and community.

Table 29

Other Positive Outcomes For Agency

	Reported by	
	Supv/coll[a]	Agency head[b]
Resource to staff/community	21 (81%)	18 (67%)
Prestige/visibility/expertise	16 (62%)	14 (52%)
Increased teaching competence	11 (42%)	6 (22%)
Collaborative efforts	10 (39%)	14 (52%)
Leadership ability	3 (12%)	6 (22%)
Overcame resistance of staff	3 (12%)	2 (7%)
Increased clinical competence	2 (8%)	5 (19%)
Knowledge gain	2 (8%)	2 (7%)
Increased interest/skill in research	1 (4%)	2 (7%)
Personal benefits (growth, etc.)	1 (4%)	0 (0%)
Broadened professional experience	1 (4%)	0 (0%)
Stimulated others	1 (4%)	2 (7%)
None mentioned	0 (0%)	2 (7%)

[a] Percent based on 26 agencies (21 fellows; excludes 4 graduate students and 1 missing case). [b] Percent based on 27 agencies (22 fellows; excludes 4 graduate students).

2. Prestige/visibility/and expertise of the fellow reflected positively on the agency.
3. Increased teaching competence of the fellow.
4. Increased collaborative efforts possible.

No major negative outcomes were mentioned for any agency.

Other positive outcomes for the fellow. During the postprogram debriefing interviews and the follow-up interviews, the fellows and supervisor/colleagues and agency heads were asked to comment or discuss other positive events which were thought to be related to the fellow's participation in the program.

While comments may in some respects overlap with outcomes that have previously been described, it is interesting to examine the nature of the unstructured, spontaneous comments related to program impact. Major positive outcomes mentioned were: (a) personal growth and related benefits to the fellow; (b) increased number of contacts/ friends and increased networking; (c) broadened professional experience; (d) increased prestige, visibility and expertise; (e) increased teaching and clinical competence; and (f) became a resource person to the staff and to the community.

Negative outcomes mentioned during the debriefing and follow-up interviews mostly fell into two categories:

(a) group conflict during the program, and (b) excessive stress and difficulty in readjusting to the student status. More negative comments were made during the postprogram debriefing (which took place immediately after completing the program) than during the follow-up interview several months later. During the follow-up, the negative ideas related to group conflict faded.

Program Outcome as Reflected by Postprogram Product Development by Fellows

It was envisioned that one major component of the program evaluation model would be an assessment of the products developed by the fellows following their completion of the program. Such products would in a sense represent very concrete examples of long-term impact of the program--or at least represent what the fellows were able to accomplish on postprogram jobs. Table 30 shows a breakdown of the products by type, for all of the fellows, across both site visits. In all, 172 products were collected and analyzed for the 26 fellows over the 15-month postprogram period following program completion. Of these, 61% were classified as educational materials. The next most frequently developed products (21%) were those related to patient care materials. Specific types within each of these two major categories are presented in the table. Of the educational materials, the most frequently developed products were for continuing education/inservice

Table 30

Types of Products

Product type	n (%)[a]	n (%)[a]
Education materials:		105 (61%)
Continuing education/inservice	73 (42%)	
Degree course	22 (13%)	
Patient/public education	10 (6%)	
Patient care materials:		36 (21%)
Procedure/protocol	21 (12%)	
Care plan	7 (4%)	
Standards	3 (2%)	
Needs assessment	4 (2%)	
Evaluation of care	1 (1%)	
Administrative materials:		11 (6%)
Job clarification	6 (4%)	
Change proposal	3 (2%)	
Management plan	2 (1%)	
Research materials		8 (4%)
Plan/proposal	3 (2%)	
Data collection	3 (2%)	
Philosophy/literature review	2 (1%)	
Presentations/speeches/articles		12 (7%)
Presentation/speech	11 (6%)	
Article	1 (1%)	
TOTAL PRODUCTS[b]	172 (100%)	172 (100%)

[a] Percent based on 172 products. [b] Number of products per fellow ranged from 0 to 27 (median = 4.5).

courses. Specifically, these products were mostly courses, but there were also needs assessments, audiovisual materials, and evaluation materials. The most frequently developed patient care materials were procedures/protocols.

The fellows were asked to describe each product collected during the site visits with respect to several characteristics. Some of the major characteristics are shown in Table 31 for each type of product, as well as for all products taken together as a group. These group characteristics are found in the total column. Some 60% of all the products had been solicited by someone other than the fellow herself. That is, the agency, supervisor, or other individual had requested that the fellow develop the product. The other 40% were self-initiated activities and products. The patient care materials were more often self-generated products than were the educational materials.

Agency support for the products was very high, with over 90% of the products receiving agency support. There were not notable differences in support across the different types of products.

The responses of the fellows when they were asked to assess the influence of the program on the development of the product are also shown in the table. Generally, across all product types, 75% of the products were reported by the fellows to have been influenced by what they had learned in the

Table 31

Fellows' Descriptions of Product Characteristics

	Type of product					
	Ed	Pt. care	Adm	Res	Pres	Total
Product solicited?	73%	33%	36%	25%	75%	61%
Agency supportive?	94%	89%	91%	88%	92%	92%
Program influence:						
Great	62%	17%	46%	0%	42%	47%
Moderate	20%	58%	27%	63%	8%	30%
Little	11%	17%	9%	38%	42%	16%
None	7%	8%	18%	0%	8%	8%
Impact - dispersal:						
Local	92%	74%	91%	88%	75%	87%
Regional, national	6%	0%	0%	13%	25%	6%
Not implemented	2%	26%	9%	0%	0%	7%
Impact - number of people:						
Median	30	50	11	10	20	30
Minimum	8	5	1	5	9	1
Maximum	1000	400	400	20[a]	6000[b]	1000
Number of products[c]	105	36	11	8	12	172

[a] Reflects immediate impact of research proposal or data collection tool; does not reflect long-term impact. [b] Journal article. Circulation list of journal exceeds this number. [c] Table percentages are based on these numbers.

program to a great or moderate extent. The educational products seem to have been affected more than the other product types (62% reflect great influence). While the clinical type products (patient care) were influenced to about the same extent when the great and moderate categories were pooled, only 17% (as opposed to the 62% for educational products) were greatly influenced by the fellows' program experiences.

Potential impact of the products was assessed by measuring judged disperal (how widely spread geographically), size of the potential audience, and type of audience. The data for these impact dimensions are shown in Table 31. Almost all the products had local dispersion as opposed to regional or national, and generally they had a median audience size of 30.

About 75% of the products were presented to audiences which contained RNs. About 25% of the products addressed audiences which also contained LVNs, MDs, and other health occupation personnel, students, and patients/families. Table 32 presents the types of audiences for the various product types.

Quality of the products was evaluated from two perspectives: the first was an assessment by the fellow and the fellows' supervisors and colleagues; the second was by an external evaluation by one of the evaluators for the project

Table 32

Types of Audiences for Products

Product		Percent of type of individual included in audience[a]				
Type	No.	RNs	LVNs	MDs & other[b]	Pts & fam	Student
CE/inservice	73	89	51	33	4	7
Degree course	22	5	0	5	0	100
Patient/public education	10	60	10	40	60	0
Patient care	34	82	18	18	56	3
Administration	11	100	46	36	36	9
Research	7	29	0	29	43	29
Presentations	12	67	33	58	0	25
Total across all product types		72	31	28	21	20

[a] Based on number of products having particular types of audiences. [b] Other health occupation personnel included social workers, physical therapists, respiration therapists, etc.

who is an RN and who has education experience in oncology and hospice nursing. The results of these evaluations are shown in Tables 33 and 34.

Table 33 also shows the extent of agreement between the fellows' ratings of their products and the supervisor/colleagues' ratings. While the relative standings of the product ratings were consistent as reflected by the contingency coefficient ($\underline{c}$ = .80, $\underline{p}$ <.001); and the Pearson $\underline{r}$ (.72, $\underline{p}$ <.001), the difference between the fellow mean rating (3.5) and the supervisor/colleague mean rating (3.7) was also significant ($\underline{t}$ = 3.76, $\underline{p}$ <.001), with the supervisor/colleague rating being higher. In general, across all fellows and products, the supervisor/colleague ratings were higher than the fellows' self ratings. Sixty-one percent of the products were rated excellent by fellows, while 72% of the products were rated excellent by the supervisor/colleagues.

Dimensions of the external evaluation of the products are shown in Table 34. Judgments by the project nurse evaluator are shown for all of the products by type. The "total" column for each external evaluation dimension shows the percentages across all products for that dimension. Of major interest is the finding that 80% of all the documents were judged to be oncology related--and about the same percentage judged to reflect program content. Specific percentages for each type of product are shown in the body of the table.

Table 33

Comparison of Fellows' Ratings of Products with Supervisor/Colleagues' Ratings

	Supervisor/colleague rating[a]				
Fellow rating	Ex	Good	Fair	Poor	Total
Excellent	93%	7%	0%	0%	61%
Good	47%	51%	2%	0%	31%
Fair	20%	10%	70%	0%	7%
Poor	0%	0%	0%	100%[b]	1%
Column total	72%	21%	5%	1%	100%

[a] Percent based on 155 products which had ratings from both fellows and supervisor/colleagues. [b] This was one product from one fellow.

Table 34

External Evaluation of Products

	Type of product					
	Ed	Pt. care	Adm	Res	Pres	Total
Oncology related content:	81%	86%	55%	38%	100%	80%
Total # products rated	105	36	11	8	12	172
Reflects program content:						
Great extent	46%	32%	22%	0%	2%	37%
Moderate extent	34%	41%	56%	29%	82%	40%
Not enough info	20%	27%	22%	71%	9%	23%
Total # products rated	91	34	9	7	11	152
Addresses national need:						
Great extent	58%	27%	22%	29%	36%	46%
Moderate extent	37%	56%	22%	43%	55%	42%
Not enough info	5%	18%	56%	29%	9%	12%
Total # products rated	95	34	9	7	11	156
Content accurate?[a]	100%	100%	100%	100%	100%	100%
Total # products rated	82	33	10	4	9	138
Content current?	100%	100%	100%	100%	100%	100%
Total # products rated	82	33	10	4	9	172
Content complete?[a]	85%	97%	90%	60%	88%	87%
Total # products rated	87	32	10	5	8	142
Product well-organized:[a]						
Great extent	58%	69%	40%	40%	44%	58%
Moderate extent	42%	29%	60%	40%	44%	40%
Slight extent	0%	3%	0%	20%	11%	2%
Total # products rated	89	35	10	5	9	148
Could be generalized:[a]						
Great extent	67%	49%	13%	17%	18%	55%
Moderate extent	28%	40%	13%	67%	82%	35%
Slight extent	5%	11%	75%	17%	0%	10%
Total # products rated	94	35	8	6	11	154

[a] Only those products for which there was enough information to make a judgment are included in these ratings.

The content was judged to be accurate and correct for all the products, and the products were for the most part well organized. With respect to whether they addressed what could be thought of as a national need, about half reflected a national need to a great extent, and 40% to a moderate extent.

Overall Summary Evaluation of Program by Fellow and Others

At program completion (debriefing) and follow-up, two questions were asked of the fellows which were thought to tap a summary impression of the value of the program to each fellow. The questions were:

1. Would you recommend the program to a friend or colleague?

2. Would you attend the program again?

The first question was also asked of supervisors/colleagues and heads of agencies. The results are shown in Table 35.

There was a shift in the positive direction on the part of the fellows in response to the would-you-recommend question between the time immediately following completion of the program and the last follow-up (15 months). That is, the perceived value of the program to them increased as they experienced on-the-job events. This shift (54% enthusiastic

Table 35

Summary Evaluation of Program by Fellows and Others

Question	Fellow[a]		Others (Follow-up)[b]	
	Debrief	Follow-up	Sup/coll	Agncy hd
Recommend to others?				
Enthusiastic YES	14 (54%)	18 (69%)	14 (67%)	14 (67%)
Qualified YES	9 (35%)	5 (19%)	3 (14%)	3 (14%)
Clear NO	3 (12%)	3 (12%)	2 (10%)	1 (5%)
Don't know enough	n/a	n/a	2 (10%)	3 (14%)
Would you come again?				
Enthusiastic YES	18 (69%)	19 (73%)	n/a	n/a
Qualified YES	6 (23%)	4 (15%)	n/a	n/a
Clear NO	2 (8%)	3 (12%)	n/a	n/a

[a] Percent based on 26 fellows. [b] Percent based on 21 agencies (19 fellows; excludes 4 graduate students and 3 missing cases).

yes Debriefing; 69% enthusiastic yes Follow-up) is a very favorable result in terms of program evaluation.

The fellows' responses to the would-you-come-again question also showed a positive, but smaller shift than the previous question. At the time of the last follow-up, the furthest point in the longitudinal evaluation model for the program, 73% of the fellows thought highly enough of their experiences in the program to say they would make the decision to attend the program if they had it to do all over again. Additional analyses showed no significant relationships between fellow characteristics and the responses to either question.

Summary

The evaluation results discussed in this section dealt with the assessment of the impact of the program at different points in time, from immediately after program completion through 15 months of postprogram on-the-job activities. Several dimensions of impact were assessed at these different points. In general, these results indicate:

1. The fellows did make significant gains in knowledges and skills as a result of program participation (based on pre/postprogram assessment).

2. Attitude modification to the extent measured by the instrument used did not take place within the pre/postprogram time frame.

3. The fellows, for the most part, stated that they had accomplished their goals related to improving their functioning as educators and clinicians, as a result of program participation.

4. Postprogram job satisfaction was generally quite high, with the most frequently mentioned negative aspect being job pressure.

5. Almost all of the fellows were involved in curriculum development activities as part of their postprogram jobs and were teaching either degree courses or continuing education and inservice courses to health professionals.

6. About half of the fellows stated that they would have liked more specific oncology content in the program; about 40% would have liked more clinical practice in the program. They thought this way after working for 15 months in their postprogram positions.

7. For the most part, fellows were involved in professional activities which would enhance their opportunity to act as change agents--to serve as a source of information for others outside their primary job areas.

8. Postprogram job performance in educational and clinical areas were both rated by supervisors as being "above average" or higher.

9. Almost all of the fellows were viewed as resource persons by the agencies for which they worked.

10. The fellows developed a large number of products as part of their postprogram job activities. These products were for the most part educational materials and patient care materials. In general, the quality of these products was

judged excellent to good both by agency personnel and by the program nurse evaluator. Most of the fellows reported that program participation influenced their product development activities.

11. At the furthest point in the evaluation model (15 months after program completion), 73% of the fellows thought highly enough of their experiences to say they would attend the program again if they had it to do all over again.

Section 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This section discusses the conclusions and recommendations resulting from the project. The basis for these have been discussed in various sections of the report. The experiences of the project staff from the inception of the project through the final statistical analyses have contributed to these conclusions and recommendations. What have been included here are what the staff thinks are major, policy oriented recommendations. Not only have the specific findings resulting from this study been examined for inclusion in this section, but an effort has been made to consider the practical implications of the conclusions and recommendations being made.

Conclusion and Recommendation 1

Conclusion

The results of the evaluation indicated that the model curriculum did have a long-term impact on fellow postprogram performance. The fellows engaged in activities and developed products which appear to have been directly influenced by their program experience. These activities and products were consistent with the model curriculum goals. To this extent, the model curriculum developed and implemented can be judged effective.

Recommendation

The core content of the model curriculum developed can be used in an education program which has the goal of preparparing nurses to function as oncology nurse educators.

Conclusion and Recommendation 2

Conclusion

Development of a model consensus curriculum, with a common philosophy and objectives, was achievable and allowed for implementation within different curriculum patterns. Advantages of the consensus approach were: (a) generalizability of the outcomes and conclusions to other oncology education programs was strengthened and (b) cost effectiveness was achieved through pooling of resources and faculty efforts. The major obstacle was time needed for feedback to reach consensus within each phase of the contract.

Recommendation

When developing future model curricula, continuance of the consensus approach would be valuable, as it produces a greater generalizability of results. There should be a fair division of labor between sites for tasks needed in curriculum development, evaluation, and report writing. Establishment of an effective feedback loop with adequate time allocated to reach consensus is essential.

Conclusion and Recommendation 3

Conclusion

This model curriculum demonstrated that, while the practice dimensions of a nursing educator include a knowledge of curriculum, clinical oncology, and change roles, some of the fellows were not able to acquire an in-depth level of expertise in all three prongs during the project's short span. Thirty to thirty-six graduate units in a 1-year program was an intensive curriculum.

Recommendation

When implementing the model curriculum in future graduate programs it may be advisable to increase the length of the program, spending more time in each of the three prongs. Another possibility may be to present an overview of the three prongs and then encourage the student to focus on one of them in more depth.

Conclusion and Recommendation 4

Conclusion

The primary goal of the fellows who were nurse educators was to increase their knowledge and clinical skills in oncology nursing. On the other hand, clinically oriented fellows valued the educational component of the model curriculum. This heterogeneity of goals and professional experience among the fellows meant that not all fellows were satisfied with the program's ability to meet all of their individual goals and needs. The completion of the program by all fellows except one is a good indicator that most of their goals were being met. The more congruent the fellow's goals were with the program goals, the more value the program was to the learner.

Recommendation

Placement of the model curriculum within a master's degree program would allow the graduate student to use the knowledge examination as a pretest for equivalency in meeting one or more of the three broad program objectives, and their coursework could be devoted toward meeting the other objectives. The goal statement in the application could be used to screen potential students by determining the compatibility of their goals with the program's goals.

Conclusion and Recommendation 5

Conclusion

The three components of the model curriculum--clinical, educational, and change role--prepared the oncology nurse educator for a variety of positions. Although the nature of oncology nurse specialist positions varied throughout the country, all of these positions included teaching, administrative, and consultant responsibilities. Faculty members in schools of nursing also needed education, clinical expertise, and change agent competencies to function in their multifaceted positions.

Recommendation

Educational offerings for nurse educator roles should include strong clinical practice and change role components as well as the educational component.

Conclusion and Recommendation 6

Conclusion

This oncology fellowship model program offered a certificate upon program completion and not a degree. This may have been a factor in the lower number of fellows who applied to the program. Since many universities and agencies require a master's or doctoral degree for employment, nurses investing a year in school might be more likely to choose a degree program versus a certificate program, even if the graduate units in the certificate program could be transferred to a graduate program.

Recommendation

This model curriculum in oncology nursing should be incorporated into a master's or doctoral program. At UAB some students who completed the fellowship did transfer the credits into the doctoral track and have gone on to complete their degrees. The curriculum would fit very well into either a master's program or doctoral program, with greater depth and focus in the doctoral program.

Educational curricula lasting more than a few months are better placed within degree programs unless a needs survey within a specific region of the country indicates sufficient interest for a certificate program.

Conclusion and Recommendation 7

Conclusion

The number of fellows in the first group was smaller than anticipated at both sites. This might be attributable to the limited time frame for some candidates to make arrangements to attend a year-long program. The period of time between contract award and the implementation of the first course offering was 1 year--Fall of 1979 to Fall of

1980. During this time the entire program was developed by consensus and approved within each university. Materials and instruments for recruitment and admission were also developed. Because of the time required for the feedback loop, actual recruitment with brochures and advertisements did not start until January 1980. This left 8 months to recruit and admit fellows, which was too limited a time period.

Recommendation

When a model curriculum of this scope is planned, a general announcement should be made immediately. The announcement would alert prospective students and help them decide about feasibility of attendance much earlier. This would increase recruitment time and decrease the time pressures of preparation for admission.

Conclusion and Recommendation 8

Conclusion

A health assessment course was not a preadmission requirement. When fellows had not had an assessment course, a great deal of faculty and student time was spent in achieving clinical competence in biopsychosocial assessment of the client.

Recommendation

Prior to admission to the program, students should be required to demonstrate proficiency in health and physical assessment techniques needed to identify clients at risk, to determine findings which indicate the probability of cancer, and to assess the status of the cancer client.

Conclusion and Recommendation 9

Conclusion

Because of stringent project timelines for implementation and evaluation, the program of classes was set with little flexibility for the adult learner. Few adjustments could be made as to the number of units carried each quarter/semester and courses were offered only one time for each fellow.

Recommendation

When adapting this model curriculum to future programs of studies, it is recommended that the graduate student be able to adjust class times and clinical activities to meet their needs with greater flexibility. Thus, the student may choose a different pattern of coursework or a different timeline for completion.

Conclusion and Recommendation 10

Conclusion

Year-long educational programs requiring full-time coursework for professional nurses often require financial support. The agencies from which the fellows came were unable to provide financial support. This would probably be true of most employing agencies unless the individual had a sabbatical leave.

Recommendation

Stipend awards should be provided for graduate professional nurses enrolled in programs where there is a dearth of clinical or educational expertise.

Conclusion and Recommendation 11

Conclusion

The longitudinal evaluation model used to assess the impact of this model curriculum provided extensive data which were essential in determining the long-term impact of the program. Without such a longitudinal model, assessment over time would not have been possible.

Recommendation

To the extent that cost constraints permit, a longitudinal evaluation model should be used to assess program impact

--especially of programs which are based on specifically developed curricula which have not been previously subjected to evaluation. While a full scale longitudinal evaluation like the one used in the present study might not be affordable, evaluators could consider selecting a sample of graduates to follow, especially if the number of graduates is fairly large. Times of the follow-up site visits could be modified depending on availability of data collection funds. If funds are really limited and the longitudinal model is still the model of choice, then data collection by mailed questionnaires should be considered.

Conclusion and Recommendation 12

Conclusion

Implementing a model curriculum with an extensive evaluation component required a greater amount of time than a standardized or established program. The pre and posttesting in the model curriculum was included within the semester/quarter time frame, which was somewhat stressful for both students and faculty.

Recommendation

When doing extensive evaluation, adequate time should be allotted outside of semester/quarter coursework for pretesting and posttesting. This means expanding the time frame on each end of the term and communicating the rationale to the students, so they will know the purpose of testing. This may increase the degree of effort and concentration the student puts into the tests, which might contribute to increased validity of results.

Conclusion and Recommendation 13

Conclusion

In this program, pre and posttest results of the knowledge tests were not immediately shared with the fellows because of the evaluation design. Fellows were able to see the overall results, but only after the completion of all postprogram evaluations. Some fellows would have benefited from the use of the knowledge test results in diagnosing their specific learning needs.

Recommendation

It is recommended that alternate forms of the pre and posttests be used when conducting formal program evaluations. Thus, the pretest could be used as a diagnostic tool in assisting students to select appropriate learning experiences. The testing materials should also be validated and reliability established in field tests on a sample of students similar to those for whom the program is intended, e.g, master's and doctoral students.

Conclusion and Recommendation 14

Conclusion

The ability of the fellows to implement changes and to develop products was affected by job situational variables. Such "contextual" variables operated as inhibitors or facilitators in the fellows' employment settings.

Recommendation

Evaluations of model curricula should include the assessment of postprogram job situational variables if postprogram job performance measures are utilized in the evaluation design.

Summary

Overall, the development and implementation of this post-master's program in oncology nursing education was effective. Benefits to the 34 fellows and their agencies are tangible and continuing, both in oncology nursing education and health care delivery arenas. Longer range benefits from this effort are likely to be seen for many years to come.

BIBLIOGRAPHY

Curriculum

Bevis, E. O. (1978). Curriculum building in nursing, a process. St. Louis: C. V. Mosby.

Green, J. L., & Stone, J. C. (1977). Curriculum evaluation: Theory and practice. New York: Springer.

Kast, F., & Rosenweig, J. (1979). Organization and management: A systems and contingency approach (3rd ed.). New York: McGraw-Hill.

Knowles, M. (1978). The adult learner: A neglected species. Houston: Gulf Publishing Company.

Cancer Surveys/Studies

Craytor, J., Brown, J., & Morrow, G. (1978, June). Assessing learning needs of nurses who care for persons with cancer. Cancer Nursing, 211-220.

Miller, S., & Herbst, S. (1978). Summary of ONS membership survey. Oncology Nursing.

Oberst, M. (1978, August). Priorities in cancer nursing research. Cancer Nursing, 281-290.

Peper, B. (1979). Cancer nursing project survey. San Francisco: American Cancer Society.

Van Scoy-Mosher, C. (1979). Oncology nursing survey. Study developed through Oncology Nursing Forum (funded by University of Southern California).

Standards

American Cancer Society. (1979). The master's degree with a specialty in cancer nursing: Curriculum guide and role definition.

American Nurses Association. (1973). Standards of nursing practice. Kansas City: American Nurses Association.

Association of Pediatric Oncology Nurses (1978). Standards of pediatric oncology nursing practice. Kansas City: American Nurses Association.

Oncology Nursing Society and American Nurses Association (1979). *Outcome standards for cancer nursing practice*. Kansas City: American Nurses Association.

Evaluation

Craytor, J., Brown, J., & Morrow, G. (1978). Assessing learning needs of nurses who care for persons with cancer. *Cancer Nursing*, *1*, 211-220.

Dixon, J. (1981, Yale University, School of Nursing). Personal communication concerning outcome measures for a graduate-level oncology nursing program.

Larsen, J. K., & Norris, E. L. (1982). *The impact of consultation*. Palo Alto: American Institute of Research.

Morrow, G. R., Craytor, J. K., Brown, J., & Fass, M. (1976). Nurses' perceptions of themselves, cancer nurses, typical ideal, and cancer patients. *Perceptual and Motor Skills*, *43*, 1083-1091.

Appendix A

CRITERIA FOR PRECEPTORS (UAB and SJSU)

UNIVERSITY OF ALABAMA SCHOOL OF NURSING
UNIVERSITY OF ALABAMA IN BIRMINGHAM
GRADUATE PROGRAM

Guidelines for Clinical Preceptors

The faculty of the Post-Master's Fellowship Program in Oncology Nursing Education agrees to:

1. Be responsible for planning with the preceptor and agency administration for experiences that will facilitate meeting the learning needs of the fellows.
2. Ensure that nursing projects instituted by the fellows will require mutual agreement between the program faculty and the director of the agency.
3. Require that fellows have current professional liability insurance.
4. Require that fellows have a current license to practice nursing in the State of Alabama.
5. Initiate an institutional contract with the selected agency.

The clinical preceptor agrees to:

1. Provide opportunities for the fellow to pursue individual learning objectives within the parameters of the agency.
2. Serve as a resource person, consultant, and/or supervisor for the fellows' clinical experience.
3. Provide an orientation to policies and procedures of the agency.
4. Teach the fellows clinical skills to improve the quality of oncology nursing.
5. Assist the program faculty and fellows in evaluating the fellows' progress during the clinical experience.
6. Have a current license to practice nursing in the State of Alabama.

A-2

Criteria for Clinical Preceptor Selection

The preceptor will:

1. Demonstrate expertise in an area of clinical oncology nursing.
2. Evidence an understanding of the educational process.
3. Evidence a willingness to serve as a clinical preceptor to facilitate learning experiences.
4. Agree to participate in the evaluation process with learners and faculty.
5. Agree to participate in clinical seminars.
6. Agree to serve as a preceptor without monetary remuneration.
7. Work in a clinical setting with a client population sufficient to facilitate the learner's experience.
8. Be licensed to practice nursing in the State of Alabama.

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SAN JOSE STATE UNIVERSITY Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Criteria for Preceptors

Criteria for Selection of Preceptor

1. Is able to articulate a knowledge of the nursing process and goal-directed nursing.

2. Understands and encourages the adult learning process.

3. Has had education in the area of oncology beyond the basic program as documented in curriculum vita and validated by transcripts or continuing education credit slip.

4. Is highly competent in at least one aspect of oncology nursing practice, has interest in and ability to teach, and has demonstrated leadership ability as documented by three letters of reference from professional colleagues.

5. Has positive attitude toward support of fellowship program and working with post-master's students evidenced in interview by project staff.

6. Has permission from employer for participation as a preceptor and in related activities.

7. Has signed letter of formal agreement between the university and preceptor.

Criteria for Volunteer Appointment to the Faculty of San Jose State University

1. Meets the criteria for preceptor.

2. Has submitted:

    2.1 Grade transcripts from schools of nursing and/or colleges attended.

    2.2 Three letters of reference.

    2.3 SJSU Statement of Professional Preparation and Experience.

3. Meets minimum requirements for faculty from the community:

   3.1 Master's degree in area of expertise.

   3.2 Licensed registered nurse in California.

   3.3 Teaching experience.

   3.4 Interest in and ability to teach adult learners.

   or documented evidence of:

   3.1 Competency in a specific area.

   3.2 Continuing education beyond the basic program.

   3.3 Licensed registered nurse in California.

   3.4 Demonstrated interest and ability to teach adult learners.

Preceptors who meet the minimum faculty requirements will be appointed at a level commensurate with education and experience.

RESPONSIBILITIES OF FELLOW, PRECEPTOR, AND FACULTY

Responsibilities of Fellow

1. Prepares goals and objectives and has them approved by instructor before discussing with preceptor.

2. Prepares contractual agreement with preceptor and instructor designating how objectives will be met.

3. Assumes responsibility for participating in planned learning experiences.

4. Participates in ongoing evaluation process including conferences with preceptor and instructor.

Responsibilities of Preceptor

1. Agrees to contractual agreement with fellow for learning experiences.
2. Makes time arrangement with fellow for observation and teaching.
3. Guides learning experiences in collaboration with fellow and instructor.
4. Willing to give honest, direct feedback during learning process.
5. Participates in evaluation process with instructor and fellow during periodic conferences.

Responsibilities of Instructor

1. Approves goals and objectives of fellow prior to giving to preceptor.
2. Makes self available for appointments with preceptor as requested.
3. Arranges a minimum of two evaluation conferences with fellow and preceptor.
4. Assigns a final grade based on satisfactory completion of course objectives.

Appendix B

PHILOSOPHY, CONCEPTUAL FRAMEWORK, BROAD AND INTERMEDIATE PROGRAM OBJECTIVES

SAN JOSE STATE UNIVERSITY
DEPARTMENT OF NURSING

UNIVERSITY OF ALABAMA SCHOOL OF NURSING
UNIVERSITY OF ALABAMA IN BIRMINGHAM

Philosophy and Conceptual Framework of the Post-Master's Fellowship Program in Oncology Nursing Education

The philosophy and conceptual framework of the fellowship program in Oncology Nursing Education are a consensus of the faculties of the San Jose State University Department of Nursing and the University of Alabama School of Nursing.

The philosophy reflects the beliefs of the faculty as related to oncology nursing practice and oncology nursing education. The conceptual framework describes the interrelated components of an oncology nursing education program building upon the previous knowledge, skills, and attitudes of post-master's fellows and enchancing their ability to function in varied roles of an oncology nurse educator.

PHILOSOPHY

Beliefs About Oncology Nursing Practice

Cancer is a concept incorporating multiple diseases many of which lead to chronic illness with physiological, psychological, economic, spiritual, and cultural impacts on individuals, their families, and the community. One of the primary goals of oncology nursing is to identify persons with high-risk factors and to promote responsibility for a healthy life style using education, research, and modification of the environment. In caring for individuals with cancer, the goals are to achieve cure/remission, to facilitate the client's self-determination through active participation in his/her own care, to rehabilitate when disability occurs, to prevent or lessen complication, and/or provide supportive terminal care.

Oncology nurses assist individuals and their families to maximize the quality of life throughout the health-illness continuum by promoting the development and use of effective health care delivery systems.

Individuals with cancer and their significant others have rights and responsibilities in relation to their health and health care. They have the right to obtain information related to the disease process, its ramifications, and alternate treatments. They should be allowed to make decisions regarding their treatment based on the quality of life which treatment will afford. When possible, they are responsible for self-reliance and self-sufficiency in their care by utilizing available resources and health care delivery systems including the services of oncology nurses.

As a member of the health care team, the oncology nurse uses the nursing process to deliver quality care to persons with cancer. The nurse functions to augment individuals' self-care abilities through teaching and guidance, through support and encouragement, and through the provision of direct care as necessary. Emphasis is placed on assisting the person wth cancer and significant others to focus on living with meaning and purpose.

Beliefs About Oncology Nursing Education

The oncology nurse educator has the knowledge, skills, and attitudes necessary to plan, implement, and evaluate curricula in oncology nursing education.

It is believed the oncology nurse educator will improve health care for clients with cancer through direct care to clients and families and through their instruction of nurses and nursing students in the practice of oncology nursing.

Application of the research process enables the oncology nurse educator to appraise the quality of care, to utilize knowledge for the improvement of care, and to generate new knowledge.

The oncology nurse educator's consultation with other health care providers involved in care of clients with cancer helps professionals to develop competencies, thus improving oncology care.

The oncology nurse educator's administrative activity focuses on the development and implementation of a plan of action designed to facilitate change in educational programs to improve the preparation of oncology nurses.

CONCEPTUAL FRAMEWORK

The conceptual framework on page B-5 identifies the components of a model oncology nursing education curriculum. The components serve as unifying concepts for courses offered in the program.

The conceptual framework includes the following eight components: the nursing process; knowledge, skills, and attitudes; roles of the oncology nurse educator; society and environment; the health care system; health-illness continuum; the client; and the learners.

1. The nursing process is the approach utilized. This process provides deliberate, systematic activity for the practice of nursing and includes the following components:

a. Assessment, which is the gathering and analysis of subjective and objective data for identification of problems leading to nursing diagnoses. The diagnoses describe the client's physiological, psychosocial, economic, spiritual, and cultural needs;

b. Planning, which establishes goals, evaluation criteria, and determines, with the client, what can be done to meet the individual's short- and long-term needs and to resolve and/or cope with problems;

c. Implementation, which describes the nursing activities employed to put the plan into action; and

d. Evaluation, which analyzes change in the client's status based on the criteria as stated in the plan of care. Evaluation is ongoing and continuous, with alterations made throughout the process as a result of this step.

Nursing process is the approach used by the nurse to make knowledgeable decisions regarding the client's care. It enables nurses to communicate with other members of the health care team in planning and providing care.

2. Knowledge, skills, and attitudes acquired during practice and graduate preparation in nursing are the foundation of the post-master's program in oncology. The goal of the post-master's program in oncology nursing education is to gain additional knowledge, skills, and attitudes that will enable the educator to function in varied roles to improve the quality of care to clients with cancer.

3. Roles of the oncology nurse educator. As facilitators of change, oncology nurse educators are clinicians, teachers, consultants, researchers, and administrators. The oncology nurse educator as a clinician is involved in assessment, planning, implementation, and evaluation of client care. The educator as a teacher is involved in assessment, planning, implementation, and evaluation of instructional programs for the preparation of oncology nurse clinicians. The purpose of education is to produce change in behavior; the educator, as a facilitator of change, utilizes change theory and process to improve nursing care of clients with cancer. As a consultant, the educator works with individuals or groups to improve nursing education and practice. As a researcher, the educator utilizes research findings, identifies areas needing research, and investigates researchable problems to improve education and nursing care. As an administrator, the educator utilizes leadership and management skills to attain the goals of health care organizations, health care providers, and clients to improve the quality of care.

4. Society and environment. Society is the arena for nursing practice. To be effective, nursing practice must be directed to meet the changing needs of society and the environment. Nursing promotes harmonious interaction between clients, society, and the environment. Since the recipients of nursing care are individuals, families, and communities, society benefits from nursing care. Clinicians prepared at the post-master's level initiate and direct planned change in response to identified societal needs.

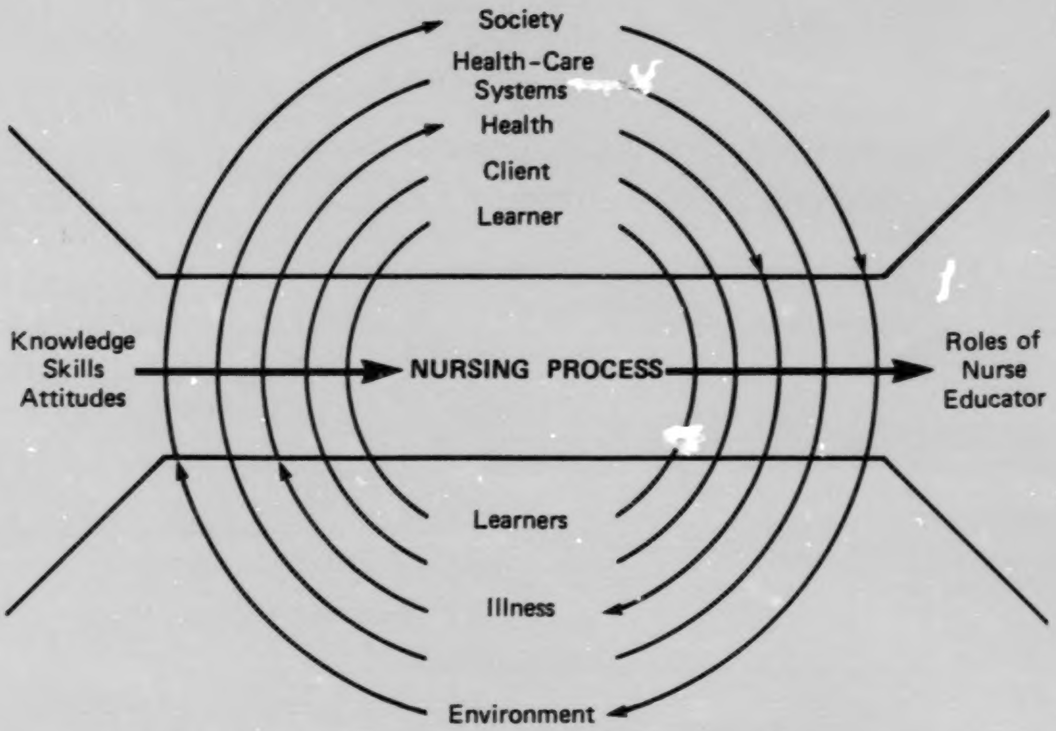
5. The health care system, an integral part of the larger social system, should develop in response to the identified health care needs of society. Health care encompasses those activities that enhance the individual's response to biopsychosocial stressors. It is provided through collaboration among a variety of health care agencies. The nature of the care required is based on an assessment of the individual's location on the health-illness continuum. The effectiveness of health care systems depends upon the accessibility and availability of local, state, and national resources to clients with cancer. Maintenance of standards for nursing practice is vital to delivery of quality health care.

6. Health-illness continuum. Health is the dynamic state of biopsychosocial functioning in which the individual continually interacts with the environment. Throughout the lifespan, the individual's state of health varies along the

health-illness continuum. Nursing exists to maximize the level of function of individuals and to help them keep reasonably free of discomfort with minimal disability and limitation of activity. Preventive measures are used along the health-illness continuum to promote health and prevent illness.

7. The client is any individual, family/group, or community having needs for primary prevention, diagnosis, treatment, health maintenance, and/or rehabilitation.

8. The learners are persons seeking educational experiences to become oncology nurse clinicians in undergraduate and graduate nursing programs or through continuing education.


Society
Health-Care Systems
Health
Client
Learner
Knowledge
Skills
Attitudes
NURSING PROCESS
Roles of Nurse Educator
Learners
Illness
Environment

Conceptual Model for Oncology Nursing Education Program.

BROAD AND INTERMEDIATE PROGRAM OBJECTIVES

Objective 1

Evaluate the quality of health care provided to clients with cancer and to facilitate change in the cognitive, affective, and psychomotor components of nursing care programs, as indicated to improve care.

1.1 Demonstrate a knowledge base in epidemiology, carcinogenesis/high risk factors, prevention, pathophysiology, detection, diagnosis, treatment, rehabilitation, and continuing care for individuals with common pediatric and adult malignancies.

1.2 Use the nursing process with a specific client with cancer that reflects an understanding of physical, economic, cultural, spiritual, and psychosocial needs in both acute and long-term phases of treatment and rehabilitation.

1.3 Utilize accepted standards (i.e., ANA, ONS) of care to improve nursing of clients.

1.4 Collaboratively design interventions to facilitate biopsychosocial coping of the client for both short- and long-term needs.

1.5 Design, implement, and evaluate client education programs that reflect an understanding of developmental, change, and teaching/learning theories.

1.6 Utilize literature and research findings to improve quality of care and education in oncology nursing.

1.7 Use community resources in the solution of client problems for both acute and long-term phases of cancer treatment and rehabilitation.

1.8 Function as an effective member of a multidisciplinary team in providing health care.

1.9 Determine the influence of motivational factors, attitudes, and cancer myths on health care behavior of clients.

1.10 Demonstrate effective communication and interpersonal skills by establishing, sustaining, and terminating therapeutic relationships with specific clients with cancer.

Objective 2

Plan, implement, and evaluate curricula that prepares oncology nurse clinicians at the undergraduate, graduate, and/or continuing education levels to function in a variety of health care agencies.

2.1 Develop and implement oncology nursing curricula utilizing one or more applicable conceptual models.

2.2 Assess the educational needs of nurses caring for clients with cancer in a variety of settings.

2.3 Apply teaching-learning theory appropriate to the content, learner, and setting in designing educational programs in oncology nursing.

2.4 Develop measurable educational objectives that reflect the knowledge skills and attitudes required at the undergraduate, graduate, and/or continuing education levels to function as oncology nurses.

2.5 Selectively use and/or develop teaching strategies appropriate for the content, learner, setting, and financial resources.

2.6 Use evaluation strategies appropriate to level of learner preparation, content, and setting in measuring educational program effectiveness.

2.7 Use principles of cost effectiveness in designing and implementing educational programs in oncology nursing.

2.8 Incorporate research findings in designing educational programs in oncology nursing.

2.9 Utilize appropriate community resources when selecting learning experiences.

2.10 Develop or strengthen an educational program in oncology nursing both during and upon completion of the fellowship program.

Objective 3

Function as a consultant, researcher, and/or administrator in cooperation with other health professionals who are interested in the health care of clients with cancer.

3.1 Function as an effective role model in preventive health practices.

3.2 Participate in the implementation of cancer screening programs in the community.

3.3 Demonstrate successful personal coping mechanisms when relating with clients with cancer.

3.4 Function as an effective facilitator of change to improve cancer care.

3.5 Lead groups designed to promote effective problem solving approaches for staff and for clients experiencing cancer.

3.6 Function as a client advocate on a multidisciplinary team by coordinating and communicating care needed by clients and their families.

3.7 Consult with individuals or groups to improve cancer nursing education and client care.

3.8 Design clinical/educational studies to investigate researchable questions in oncology nursing.

3.9 Identify available resources for delivering care to clients with cancer and factors that influence the accessibility and availability of these resources.

3.10 Participate in legislation to influence policies that relate to primary prevention, cancer treatment and rehabilitation, and health care delivery systems.

3.11 Collaborate with industry and health agencies to influence positive environmental/occupational changes related to risk factors in the region.

3.12 Use support groups to assist in the development/implementation of oncology nursing programs.

Appendix C

CORE CURRICULUM

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Core Curriculum

Program Objective 1

Evaluate the quality of health care provided to clients with cancer and to facilitate change in the cognitive, affective, and psychomotor components of nursing care programs, as indicated to improve care.

Content

1. Epidemiology
    a. Incidence
    b. High-risk population
    c. Geographic distribution
    d. Morbidity/mortality statistics
    e. Research studies and issues

2. Carcinogenesis
    a. Oncogenic viruses
    b. Chemical agents
    c. Physical agents
    d. Immunological deficiency
    e. Mutation

3. Pathological changes common to cancer
    a. Cancer histology and growth kinetics
    b. Characteristics of benign/malignant tumors
    c. Local and systemic tumor effects
    d. Routes of metastases
    e. Tumor classification

4. Cancer diagnosis and screening
    a. Preventive measures for general population high-risk groups
    b. American Cancer Society standards for screening
    c. Diagnostic workups for specific tumors, i.e., radiology, cytology
    d. Tumor board activities related to decisions of treatment

5. Common pediatric and adult malignancies
    a. Breast cancer
    b. Lung cancer
    c. Gastrointestinal cancer
    d. Head and neck cancer

e. Female gynecological cancer
f. Male genital cancer
g. Urological cancer
h. Central nervous system cancer
i. Leukemia
j. Hodgkins and non-Hodgkins lymphoma
k. Bone and sarcoma cancers

6. Treatment
   a. Major modalities
      (1) Surgery
      (2) Radiation
      (3) Chemotherapy
      (4) Immunotherapy
   b. Treatment concepts
      (1) Single or combination treatment
      (2) Adjuvant therapy
      (3) Protocols
      (4) Tumor registries
      (5) Tumor boards

7. Ethical considerations
   a. Major ethical issues and considerations, i.e., quality of life, compliance
   b. Informed consent
   c. Alternative treatment methods and quackery
   d. Cancer myths

8. Phases of care
   a. Four phases
      (1) Treatment
      (2) Rehabilitation
      (3) Continuing care
      (4) Terminal care
   b. Concepts related to care phases
      (1) Realistic expectations related to treatment
      (2) Prognosis
      (3) Physical and psychological limitations
      (4) Socioeconomic factors
      (5) Coping mechanisms
      (6) Side effects of treatment

9. Delivery systems
   a. Acute care research centers--creating and testing protocols
   b. Community hospitals
   c. Home health care agencies
   d. Hospital and home care hospices

10. Psychosocial stress of cancer
    a. Physical, economic, cultural, spiritual, and psychological impact on patient and family
    b. Motivational factors, attitudes of cancer on patient/family
    c. Specific stress/coping theories, e.g., Lazarus, Weisman, White
    d. Biopsychosocial adaptive behaviors and interventions for meeting short and long-term needs
    e. Community resources available for acute and long-term needs of cancer treatment, rehabilitation, and continuing care
    f. Factors that facilitate coordination of services from multiple health care systems
    g. Support systems as modifiers of stress

11. Oncology nursing practice
    a. Nursing role in cancer care
        (1) Care giver role and coordinator of total patient care in acute or home setting
        (2) Function as a clinician on an interdisciplinary team
        (3) Symptom management approach of potential problems
            - Pain
            - Nutrition
            - Fluid and electrolyte imbalance
            - Elimination
            - Infection
            - Bleeding
            - Psychological crises, e.g., anxiety, altered self-image
            - Permanent changes from treatment such as ostomies, prostheses, radical body changes
        (4) Implement and evaluate Oncology Nursing Society and American Cancer Society standards of care
        (5) Application and critique of assessment tools designed for a specific symptom related to cancer care in which there is a need for management

    b. Critical clinical skills identified for this project (*Skills identified for validation)
        (1) Wound care
        (2) Ostomy care
        (3) Tracheostomy care
        (4) Physical assessment
            - Gastrointestinal
            - Cardiopulmonary
            - Breast exam
        *(5) Intravenous therapy

    (6) Parenteral therapy such as nasogastric feedings, hyperalimentation, use of Hickman catheter
    (7) Administration of chemotherapy
    (8) Relaxation techniques
    (9) Management of protective environments
    *(10) Breast examination

c. Cognitive skills necessary to function as an effective clinician on an interdisciplinary health care team in oncology.
    (1) Critical thinking and advanced skills related to biopsychosocial assessment and individualized care
    (2) Effective communication and interpersonal skills used in establishing, sustaining, and terminating therapeutic relationships with cancer clients
    (3) Ability to use current research findings that impact client care protocols
    (4) Ability to identify and work with educational needs of cancer clients/families related to treatment, side effects and long-term consequences of disease and treatment
    (5) Ability to work with hospice concepts related to quality of life in home care and hospital settings.

Program Objective 2

Plan, implement, and evaluate curricula that prepares oncology nurse clinicians at the undergraduate, graduate, and/or continuing education levels to function in a variety of health care agencies.

Content

1. Strategies for assessment of educational needs and appropriate learning environment for professionals involved in the care of cancer clients in a variety of settings.
    a. Characteristics of the adult learner
        (1) Motivation, value of achievement
        (2) Goal oriented
        (3) Fear of failure

2. Management techniques and leadership styles appropriate to curriculum development and implementation.

3. Learning theories and teaching strategies appropriate to child and adult patient teaching, and undergraduate, graduate, and/or continuing education levels.
   a. Learning domains
      - Psychomotor
      - Cognitive
      - Affective
   b. Feedback
   c. Learning theories
      - Problem solving
      - Mastery
      - Concept
      - Discrimination
      - Conditioning
   d. Values clarification process for learner and teacher.

4. Systems theory and nursing conceptual models applicable to oncology nursing practice and education.

Nursing Conceptual Models

Sister Collista Roy:	Adaptation
Virginia Henderson:	Human Needs
Dorothy Johnson:	Behavioral System
Imogene King:	Human Behavior
Lydia Hall:	Rehabilitation
Myra Levine:	Health and Disease
Margaret Neuman:	Health Care System Theory
Dorothea Orem:	Self-Care
Hildegard Peplau:	Interpersonal Relations
Martha Rogers:	Unitary Man

5. Steps in curriculum development or modification
   a. Needs/feasibility assessment
      - Cost-effectiveness of educational programs
      - Solicitation of support for assistance in program development and implementation
   b. Philosophical statement
   c. Conceptual framework
      - Congruence of an educational program's philosophy, conceptual framework, goals, and objectives
   d. Measurable educational objectives for program/unit of study
   e. Content and process identification
      - Selection of content and teaching strategies
      - Course/class requirements
      - Incorporation of appropriate research findings

- f. Evaluation criteria and strategies
  - Normative and criterion referenced evaluation, validity, and reliability
- g. Implementation strategies
  - Utilization of resources in developing, implementing, and evaluating educational offerings.

Program Objective 3

Content

Function as a consultant, researcher, and/or administrator in cooperation with other health professionals who are interested in the health care of clients with cancer.

Content

1. Preventive health practices
   - a. Self
   - b. Cancer screening programs
   - c. Public education programs
   - d. Collaboration of nursing industry and health agencies to decrease environmental and occupational risk factors

2. Health care planning and delivery
   - a. Patient advocacy
   - b. Health care policies related to cancer care
   - c. Factors influencing supply and demand of health care delivery to cancer clients
   - d. Strengths and limitations of the health care system in providing resources for cancer care
   - e. Strategies for improving delivery of care in various health care agencies
     - Acute care units
     - Home health care agencies
     - Hospice units (in hospital and home care)
     - Oncology clinics and doctor's offices

3. Facilitator of change
   - a. Planned change in relationship to clinical and/or educational problem or need
     - Needs assessment
     - Individual/agency goals and objectives
     - Selection of strategies for change
     - Implementation process and evaluation strategies
   - b. Characteristics of a change agent
   - c. Promotor and inhibitor of change
   - d. Resistance to change

   e. Decision making related to change
   f. Motivation related to the change process
   g. Delegation of power

4. Research in oncology nursing and education
   a. Awareness of significant studies
   b. Ability to critize and utilize findings
   c. Formulation of a research proposal
      - Statement of problem
      - Review of literature
      - Conceptualization of problem
      - Research question/hypothesis
      - Selection of methodology
   d. Use of research to set standards and identify problems

5. Consultant role
   a. Purposes of consultation
      - Knowledge of accessibility and availability of resources
      - Clinical expertise
      - Educational expertise
      - Effective change agent
      - Facilitation of group problem or solution
   b. Process and outcome consultation for individuals and groups
   c. Formulation of a contract for consultation
   d. Consultant responsibilities
   e. Identification of values and coping mechanisms within an organization
   f. Problem solving in consultation
   g. Disengagement in consultation

6. Administrator role
   a. Administrative/management skills
   b. Time planning
   c. Task analysis
   d. Cost effectiveness
   e. Coordinating functions/scheduling

7. Promotion of legislation to influence policies
   a. Primary prevention
   b. Cancer treatment and rehabilitation
   c. Upgrading health care delivery systems
   d. Decrease environmental risk factors

Appendix D

PROGRAM OF STUDIES AND BRIEF COURSE DESCRIPTIONS

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Program of Studies

Fall Courses	Semester Units
Nursing 210 - Basic Concepts of Oncology	4
Nursing 211 - Assessment and Management of Cancer Clients	5
Nursing 212 - Preceptorship in Oncology Nursing Practice	5
	14

NOTE: N.210 and N.211 are the theory courses for the clinical experiences in N.212.

Spring Courses	
Nursing 213 - Health Care Planning in Oncology Nursing	3
Nursing 214 - Curriculum Development in Oncology Nursing Education	4
Nursing 215 - Preceptorship in Oncology Nursing Education	3
	10

NOTE: N.213 is the theory course for N.216 offered in the summer.
N.214 is the theory course for N.215.

Summer Session (12 weeks)	
Nursing 216 - Preceptorship in Expanded Roles of Oncolocy Nursing Practice	6
TOTAL UNITS	30

SAN JOSE STATE UNIVERSITY
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Brief Course Descriptions

N.210 BASIC CONCEPTS OF ONCOLOGY NURSING PRACTICE - 4 units

The concepts presented in this course provide a knowledge base for oncology nursing practice. Concepts to be included are epidemiology, carcinogenesis, cancer pathology, high-risk factors, prevention, detection and diagnosis, rehabilitation, and treatment protocols for common pediatric and adult malignancies. Preventive measures and treatment protocols will be discussed for the malignancies in the following systems: pulmonary, gastrointestinal, endocrine, skeletal, genitourinary, central nervous system, reproductive, lymphatic, and hematopoietic. Oncology research findings will be identified to verify and explain the rationale of basic oncology concepts. Physicians, scientists, and oncology nurse clinicians who are experts in a specific area of oncology will be guest lecturers. Emphasis will be placed on the integration of knowledge to be used as a basis for implementation of the nursing process.

N.211 ASSESSMENT AND MANAGEMENT OF CANCER CLIENTS - 5 units

This course uses the nursing process as a framework for integrating and synthesizing relevant knowledge, strategies, and skills needed by the oncology nurse clinician during the prevention, detection, diagnosis, treatment, rehabilitation, and continuing care phases of care of the client with cancer. The course will focus on two clinical approaches, biopsychosocial systems assessment and symptom management, as a means of client assessment and intervention. The fellow will formulate concepts concerning the physical, psychosocial, economic, cultural, and spiritual impact which cancer has on the individual, family, and community through critiquing and applying significant research studies, discussing issues with clinical experts, and sharing data obtained when caring for clients with cancer.

N.212 PRECEPTORSHIP IN ONCOLOGY NURSING PRACTICE - 5 units

In this course the fellow uses the nursing process and knowledge gained in N.210 and N.211 to provide high quality care to individuals and their families in a variety of settings in which preventive, diagnostic, treatment, rehabilitative, and continued supportive oncology care occurs. Preceptored clinical experience provide opportunities for evaluating and upgrading clinical competence, for acquiring specialized skills needed for nursing practice protocols and for sustaining therapeutic client nurse relationships. Major emphasis is placed on biopsychosocial systems assessment and symptom management, on using community resources, teaching client education programs, and functioning as an effective member of an interdisciplinary health care team.

N.213 HEALTH CARE PLANNING IN ONCOLOGY NURSING - 3 units

This course explores the direct and indirect modes of health care planning and delivery related to oncology care for individuals, families/groups, and communities. Concepts, processes, and strategies used by oncology nurse educators to collaboratively plan with concerned community members will be discussed considering needs, costs, resources, and sociopolitical aspects. Expanded nursing roles in which the oncology nurse clinician and educator functions as a client advocate, health care planner, consultant, and administrator will be analyzed.

N.214 CURRICULUM DEVELOPMENT IN ONCOLOGY NURSING EDUCATION
4 units

This course will explore learning theories, conceptual models, and teaching/evaluation strategies applicable to curricula designed to prepare oncology nurse clinician at the undergraduate, graduate, and/or continuing education levels. The focus will be the process for developing programs for the adult learner, specifically student populations similar to those in the fellows' home, school, or agency. Individual learning needs and goals of the fellows will be considered in course activities. Opportunities will be provided for developing and instituting various teaching and management strategies.

N.215 PRECEPTORSHIP IN ONCOLOGY NURSING EDUCATION - 3 units

During this preceptored experience the fellow will plan, implement, and evaluate a self-directed teaching project designed to prepare oncology nurse clinicians at the undergraduate, graduate, and/or continuing education levels to function in a variety of health care agencies. Reality validation of the effectiveness of the educational programs developed by the fellow will be done with student populations in settings similar to their home school or agency. Individual learning needs and goals will be incorporated when planning preceptorship experiences.

N.216 PRECEPTORSHIP IN EXPANDED ROLES OF ONCOLOGY NURSING PRACTICE - 6 units

This course provides the fellow opportunities to explore health care delivery systems, to evaluate the quality of health care provided to cancer clients within a community, and to implement change in the cognitive, affective, and psychomotor components of nursing care program as indicated to improve care. As a consultant, researcher, and health care planner, the fellow will function independently and in cooperation with other health professionals to effect planned change in client care, oncology nursing practice, and/or education. A major emphasis is on involvement with economic, political, and legislative aspects of health care planning and delivery. During this preceptored experience the fellow will design a clinical/educational research study based on a needs assessment.

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UNIVERSITY OF ALABAMA IN BIRMINGHAM
GRADUATE PROGRAMS

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Program of Studies

		Credit[a] Hours
Fall		
NON[b]620	Advanced Clinical Oncology Nursing Practice	5
	Electives	4
		9
Winter		
NON 652	Development of Oncology Nursing Curricula	4
NED 654	Evaluation of Instruction	2
NED 653	Health Education Media	3
		9
Spring		
NON 655	Roles of the Oncology Nurse Educator	5
NED 751	Instructional Development in Nursing	3
		8
Summer		
NON 623	Advanced Oncology Nursing Practicum	5
NUR 692	Research Seminar	1
	Electives	4
		10
	TOTAL HOURS	36

Note: Fellows may wish to take one elective during the Spring Quarter.

[a] Credit hours represents semester units.
[b] NON refers to oncology courses.

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POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Course Descriptions

NON 620 ADVANCED CLINICAL ONCOLOGY NURSING PRACTICE

5 semester hours

The content and clinical experience in this course will focus on concepts needed to evaluate the health care of clients with common pediatric and adult malignancies. Concepts to be included are epidemiology, carcinogenesis, high-risk factors, prevention, diagnosis, treatment, rehabilitation, and continuing care for individuals with cancer. Emphasis will be placed on the use of the nursing process with specific clients to reflect an understanding of physical, economic, cultural, spiritual, and psychosocial needs in both acute and long-term phases of treatment and rehabilitation. Standards of care will be used as guides to improve the quality of nursing care provided to clients.

NON 652 DEVELOPMENT OF ONCOLOGY NURSING CURRICULA

4 semester hours

Curriculum development and teaching strategies will be emphasized in this course. Research findings will be explored to enhance cost effectiveness in designing, implementing, and evaluating curricula that prepare nurses at the undergraduate, graduate, and/or continuing education level in a variety of settings. The course will focus on theories of development, change, teaching, and learning theories to utilize in applying conceptual models in educational program development.

NED 654 EVALUATION OF INSTRUCTION

2 semester hours

The course provides an overview of evaluation techniques that enable students to plan, implement, and interpret evaluation studies in the areas of curriculum and instruction, learner outcomes, and program impact. Basic skill areas in evaluation design and methodology will be emphasized. Emphasis is on assessment of the education needs of nurses practicing in a variety of settings and develop measurable educational objectives that reflect the knowledge, skills, and attitudes required at the undergraduate, graduate, and/or continuing education levels to function as nurses in a variety of settings. Evaluation strategies appropriate to level of learner preparation, content, and setting in measuring educational program effectiveness will be utilized.

NED 653 HEALTH EDUCATION MEDIA
3 semester hours

Basic media design, production and utilization principles, and techniques that can be used by health professionals to facilitate teaching-learning activities will be emphasized. Development of materials useful for oncology nurse educators will be a focus in this course.

NON 655 ROLES OF THE ONCOLOGY NURSE EDUCATOR
5 semester hours

The role theory and change theories will be developed to enhance the nurse educator to function as a consultant, researcher, and/or administrator in cooperation with other health professionals involved in the health care of clients with cancer and their families. Emphasis will be on the role of the consultant as a facilitator of change and incorporation of principles of management into the implementation of oncology nursing education programs. There will be a focus on various settings such as screening in the community, industry, health agencies, and support groups who assist in development and implementation of oncology nursing programs.

NED 751 INSTRUCTIONAL DEVELOPMENT IN NURSING
3 semester hours

This course includes theory, process, trends, and issues in utilization of instruction development and techology in nursing. Emphasis will be placed on oncology nursing education for undergraduate, graduate, and/or continuing education.

NON 623 ADVANCED ONCOLOGY NURSING PRACTICUM
5 semester hours

This course will focus on the analysis of an educational program to determine how to develop or strength the oncology nursing component, with application of skills in curriculum development and evaluation. Fellows develop or strengthen an educational program in oncology nursing and have clinical/field experience in the roles of the oncology nurse educator.

NON 692 RESEARCH SEMINAR
1 semester hour

Emphasis will be on the current state of research in oncology nursing clinical practice and in nursing education. Fellows identify researchable questions (in the area of oncology nursing) and formulate conceptual frameworks, critique research reports, and discuss format for abstracts. Research findings are incorporated in designing oncology education programs and will be evaluated in relation to relevance to oncology nursing practice.

Electives

FAMILY DYNAMICS. Theories of family dynamics. Historical and anthropological perspectives, research findings, and clinical investigation of a family. 3 hours credit.

INTERPERSONAL DYNAMICS OF SMALL GROUPS. Theories of small groups. Guided experience in small groups. 2 hours credit.

ADMINISTRATIVE-SUPERVISORY PROCESS IN NURSING PRACTICE. Management functions of administrative-supervisory process in nursing; techniques and skills requisite to administration of client services. Multifaceted responsibility of clinical nursing specialist as administrator; current issues, problems, trends. 2 hours credit.

STRATEGIES FOR TEACHING NURSING. Teaching-learning process applied to clinical instruction, staff development, client education. 2 hours credit.

PSYCHOLOGICAL FOUNDATIONS OF LEARNING APPLIED TO HEALTH CARE. Basic psychological concepts, principles, theories, and research findings for analyzing learning situation in health care settings. 2 hours credit.

CURRICULUM DEVELOPMENT IN NURSING EDUCATION. Principles and methods of curriculum development; factors that determine content and organization of curricula in schools of nursing. 2 hours credit.

HEALTH EDUCATION MEDIA. Research principles and methods; proposal writing and contributions of research in improvement of nursing. 3 hours credit.

CONSULTATIVE PROCESS IN NURSING. Theoretical foundation, major issues, and problems of nurse consultant. 1-2 hours credit.

Appendix E

STUDENT EVALUATION PLANS

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Evaluation Plan

Fall

N.210 BASIC CONCEPTS OF ONCOLOGY NURSING PRACTICE

76.0%	Examinations (multiple choice/completion)
22.0%	Individual class presentation
2.0%	Weekly class participation

N.211 ASSESSMENT AND MANAGEMENT OF CANCER CLIENTS

5.0%		Critique of oncology practice protocol or standard
5.0%		Critique of audiovisual materials
85.0%		Written paper in two parts:
	42.5%	Part A - Application of theory to a selected clinical problem
	42.5%	Part B - Plan for symptom management
	5.0%	Weekly class participation

N.212 PRECEPTORSHIP IN ONCOLOGY NURSING PRACTICE
Clinical requirements for Credit Grade

1. Completion of core experiences for oncology nursing practice.

   1.1 Fellow will choose a client for whom she/he is the primary caregiver/coordinator of care (during clinical hours and as a member of a health care team) during at least two phases of care (diagnostic, treatment, rehabilitative, continued supportive, terminal). An individualized nursing care plan for this client will be developed, implemented, and evaluated throughout the experience using accepted standards of care.

   1.2 Fellow will have at least one client experience in several phases of care. The settings in which these experiences occur may be inpatient, outpatient department or home. The important experience is the utilization of resources in these settings, especially in the home setting.

1.3 Fellow will develop a therapeutic relationship with a client and significant others doing all of the following activities:

- Help identify needs, problems, and assets and facilitate meeting of several unmet needs.

- Help problem solve and mobilize resources of all kinds.

- Teaching.

1.4 Fellow will participate on a team in the management of at least four major symptoms, including malnutrition and pain.

1.5 Fellow will care for clients who are receiving or have received chemotherapy, radiation, and/or surgery for cancer.

2. Participation in caring for individuals requiring at least two of the following special skills/abilities.

2.1 Enterostomal therapy
2.2 Hyperalimentation, tube feedings
2.3 Permanent venous catheter care
2.4 Radiation implant care
2.5 Blood component therapy
2.6 Infection control
2.7 Laryngectomy/tracheostomy care
2.8 Wound care
2.9 Venipuncture
2.10 Intravenous therapy

3. Contractural agreements with preceptor(s) and faculty member that includes:

3.1 Assessment of learning needs
3.2 Objectives for preceptored experiences
3.3 A plan for achieving and documenting achievement of course and individual objectives. Plan must have instructor approval prior to presenting to preceptor.

4. Participation in conferences and seminars.

5. Completion of self, faculty, and course evaluation rating scales.

Spring

N.213 HEALTH CARE PLANNING IN ONCOLOGY NURSING

5% Role and leadership activity
20% Written plan for role implementation
20% Issue presentation (faculty and peer evaluation)
50% Written term paper and related presentation (group project)
5% Weekly class participation

N.214 CURRICULUM DEVELOPMENT IN ONCOLOGY NURSING EDUCATION

85% Curriculum project
15% Critique of research related to oncology nursing education

N.215 PRECEPTORSHIP IN ONCOLOGY NURSING EDUCATION

Course requirements for credit grade.

1. Make a contractual agreement with a preceptor in a selected educational setting.
2. Partipation in conferences and seminars with preceptor and faculty.
3. Implement the oncology nursing educational unit of study developed in N.214.

NOTE: The written materials related to this course are a requirement of N.214.

Summer

N.216 PRECEPTORSHIP IN EXPANDED ROLES OF ONCOLOGY NURSING PRACTICE

1. Client case load
2. Participate in client education or health care planning meetings.
3. Function in a variety of expanded roles.
4. Participate in confences and seminars.
5. Formulate a clinical/educational research question and methodology.

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POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Evaluation Plan

Fall

NON 620 ADVANCED CLINICAL ONCOLOGY NURSING PRACTICE

20%	Examinations (2)
10%	Completion of chemotherapy course
20%	Development of standard client care plan
10%	Nursing process flowsheet
10%	Health assessment techniques
30%	Clinical performance

Winter

NON 652 DEVELOPMENT OF ONCOLOGY NURSING CURRICULA

50%	Evaluation of an existing oncology nursing program
50%	Design of a course in oncology nursing
S/U	Preparation of annotated bibiography cards
S/U	Clinical performance (individual contracts)

NED 654 EVALUATION OF INSTRUCTION

50%	Examination (midterm, openbook)
50%	Evaluation Project--Students will select one of four simulated problems, or one of own choosing, for which they will develop an evaluation plan. Students will produce a technical approach describing:

1. Context evaluation
2. Process evaluation
3. Outcome evaluation
4. A statement of evaluation criteria
5. A description of data collection methods
6. A description of data collection instruments
7. A description of the data analysis
8. A description of method of reporting data.

Spring

NON 655 ROLES OF THE ONCOLOGY NURSE EDUCATOR

50%	Coordination of content-specific seminar
50%	Analysis of administrative structure and functioning of a selected nursing education program
S/U	Clinical performance (individual contracts)

Summer

NON 623 ADVANCED ONCOLOGY NURSING PRACTICE

20%	Preparation of Teaching Skills Evaluation
80%	Demonstration of teaching skills

NON 692 RESEARCH SEMINAR IN ONCOLOGY NURSING EDUCATION

40%	Evaluation of current state of research in oncology nursing education and practice
20%	Development of research questions
10%	Formulation of conceptual framework
10%	Critique a research study or abstract
20%	Classroom participation

Appendix F

ACTIVITY GUIDES

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM
IN ONCOLOGY NURSING EDUCATION

N.211 Criteria for Critique of an Oncology Nursing Standard 10 points

In your oral presentation the following objectives should be met:

1. Identifies who developed standard.

2. Discusses legal implications of standard application.

3. Includes:
    a. Statement of purpose of standard and how it is used.
    b. Education and experience of personnel using standard.
    c. Characteristics of client population where standard is used.
    d. Characteristics of setting where standard is used.

4. Analysis of standard content includes whether:
    a. Problem for standard application is defined.
    b. Rationale for standard is included.
    c. Criteria for meeting the standard is stated.
    d. Referrals to appropriate protocols for achieving the standard are made.
    e. Standard reflects incorporation of current knowledge and research.
    f. Evaluation criteria are included.
    g. Periodic review and update of standard is a specific assigned responsibility.
        - New knowledge and research is incorporated
        - Revised standards are distributed and distributed and discussed by personnel using them.
        - Systematic feedback is obtained for reviewing effectiveness of standards.

5. Includes summary of adequacy, usability of standard.

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SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM
IN ONCOLOGY NURSING EDUCATION

N.213 Issue Presentation Criteria

1. Faculty evaluation of presentation - 30 points

   - Clear, concise statement of oncology health care controversial issue raised in course content. (Issue must be related to health care planning and delivery. Topic of issue presentation must be submited to faculty for approval.) 2.5 points
   - Issue place in historical perspective supported by a knowledge base. 5.0 points
   - Factors influencing controversy of issue or problem; i.e., politics, economics, ethics, power, resources. 8.0 points
   - Strategies and alternative strategies suggested for problem resolution. Strategies supported by a rational decision-making process taking into account influencing factors. 8.0 points
   - Statement of student's choice of strategy, or stand on issue with rationale. 2.5 points
   - Ability to defend position on issue with knowledgeable rebuttal. 4.0 points

2. Peer evaluation of presentation 10.0 points

   - Same criteria

UNIVERSITY OF ALABAMA SCHOOL OF NURSING
UNIVERSITY OF ALABAMA IN BIRMINGHAM
GRADUATE PROGRAM

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Clinical Evaluation

Fellow's Name________________________ Date________________

Rater's Name/Title____________________ Clinic/Dept.________

INSTRUCTIONS:

Please comment on any observations made of the fellow's nursing care of the client with cancer. All areas of possible activity are listed. Please comment only on those that you observed or that the fellow participated in while in your area.

	Yes	No
Part 1. OBTAINING A DATABASE		
Obtains an accurate history; reviews physical exam in a systematic manner; anticipates modification of physical exam based on the individual's problems, physical limitation, etc.; knows appropriate epideriologic data for a give problem; knows relevant methods of cancer detection.	__	__
PART 2. COMMUNICATING DATA BASE AND FINDINGS		
Assembles and records information in a systematic manner; presents findings, studies ordered, impressions, and plans for care in a concise manner when consulting with other members of the health care team.	__	__
PART 3. PLANNING CARE FOR INDIVIDUALS WITH CANCER		
Identifies problems, formulates a problem list, and establishes priorites of care; recognizes appropriate therapy, indicating an understanding of the pathology of the disease including behavior and spread of specific tumors, management and complications; adapts nursing care according to identified		

parameters and client response; includes plans for quality assurance to evaluate nursing effectiveness. __ __

PART 4. NURSING BEHAVIORS NEEDED BY THE CLIENT/FAMILY WHO HAS CANCER

Prevents and reduces infection (esp. nosocomial); maintains comfort; implements care to modify side effects of therapy (e.g. administration of blood components); maintains nutrition; assists with rehabilitation needs; including guidance on sexuality and self-image; incorporates community and hospital health agencies resources; assists family when one member has long-term illness, including living with loss; administers chemotherapy or immunotherapy. __ __

PART 5. PROVIDING CLIENT/FAMILY EDUCATION

Explains the role of the opncology nurse; encourages proper self-care; encourages client compliance; explains the rationale for various treatment modalities (e.g., chemotherapy). __ __

SAN JOSE STATE UNIVERSITY
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POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

N.214 CURRICULUM PROJECT - 255 points

The following components will be evaluated in your written teaching project which should be submitted in a notebook with components organized with appropriate headings.

1. Management outline 20 points
    a. Project objectives
    b. Task and strategy indentification
    c. Time schedule for completing project

2. Needs/feasibility assessment 30 points
    a. Availability of selected learner population
    b. Identify educational and environmental factors influencing offerings
    c. Feasibility of offering
        - Agency agreements
        - Identification of source/type of credit to be received by learner
        - Scheduling and fellow/faculty responsibilities
    d. Specific learning needs survey
        - Content to be based on outcome
    e. Cost involved and cost-effectiveness

3. Philosophical statement 20 points
    a. Identify components and state beliefs

4. Conceptual framework 30 points
    a. Selection of concepts to be included
    b. Selection of appropriate learning theories
    c. Selection and application of nursing theory/theories
    d. Incorporation of related research
    e. Develop a model to demonstrate relationship of identified components

5. Program (unit of study) objectives 15 points
    a. Attainable in time allocated
    b. Realistic
    c. Congruent with philosophy, conceptual framework, and content

6. Content and process identification 40 points
   - a. Selection of content--complete detailed outline of content
   - b. Selection of teaching strategies
   - c. Develop course description and course objectives
   - d. Selection of learning resources (i.e., bibliography, audiovisual aids.
   - e. State course requirements
   - f. Write course evaluation criteria
   - g. Develop evaluation strategy (i.e., tests.

7. Preparation and implementation 60 points
   - a. Publicity and recruitment materials (as appropriate)
   - b. Completion of course credit forms and submit to appropriate person
   - c. Develop detailed teaching guide
   - d. Preparation of course materials for learner (i.e., syllabus, handouts, phamplets)
   - e. Criteria for evaluation of project effectiveness
     - Self-evaluation tools
     - Teacher evaluation tools
     - Learner evaluation tools
     - Course evaluation tools
   - f. Complete class and grade rosters

8. Evaluation of project 40 points
   - a. Description of the implementation of the program
   - b. Summary of results of evaluation tools used and submission of appropriate forms for course credit
   - c. Evaluation of the outcome of the presentation including a detailed proposal for changing any aspect of the project components (1 through 7).

F-7

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GRADUATE PROGRAM

POST-MASTER'S FELLOWSHIP PROGRAM IN
ONCOLOGY NURSING EDUCATION

NON 623 Teaching Skills Evaluation Form

Teacher Performance/Characteristics

	Yes	No	Comments
1. Planning and Organizing			
a. Objectives clear	___	___	________
b. Content logical and sequenced	___	___	________
c. Content matches objectives	___	___	________
d. Teaching resources congruent with objectives	___	___	________
2. Implementing			
a. Objectives achieved	___	___	________
b. Learner participation encouraged	___	___	________
c. Content appropriate to level of adult learner	___	___	________
d. Topic applicable to at least one of the five UAB Oncology Nurse Educator roles	___	___	________
e. Sensitive to responses/reactions of learners	___	___	________
f. Summarizes	___	___	________

3. Evaluating

Please answer the following questions for the designated class period.

a. What words did I use today that you did not understand?
b. Describe any situations where I punished or put down students in class today?
c. Which of the questions that were asked today were not answered satisfactorily?
d. Give specific examples of teacher indifference to student needs.
e. Give specific examples of how class discussions or individual student ideas were encouraged.
f. What other feedback would you like to give me? (Be specific.)

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SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

N.213	Role Implementation Plan	40 points

Purpose: Explore, analyze, and develop a plan for implementation of a selected role in oncology nursing education, research, administration, or clinical practice.

1. Description of selected role — 7 points
   - Defines role
   - States purpose and objectives
   - Delineates function, responsibility, accountability
2. Description of selected setting — 2 points
3. Determination of value — 5 points
   - Analyzes cost vs. benefit to self and organization
   - Considers personal qualifications
   - Considers organizational benefits to self
4. Environmental Assessment — 8 points
   - Identifies significant environmental assessment factors
   - Discusses the facilitory/inhibitory nature of those factors
   - Identifies potential constraints or problems
5. Strategies for implementation — 10 points
   - Identifies and describes alternatives
   - Selects appropriate strategies
   - Gives rationale for selected strategies with supporting data
   - Includes all steps in process of role development and implementation
6. Evaluation of effectiveness — 8 points
   - Plans tools and strategies for evaluating effectiveness of role
   - Plans for use of evaluation data

Use APA format for paper. The score on late papers will be deducted 10%.

Appendix G

SUMMARY SHEET FROM ADMISSION APPLICATION ADDENDUM

SUMMARY SHEET FROM
ADMISSION APPLICATION ADDENDUM

NURSING EXPERIENCE		TYPE OF AGENCY							AGENCY SETTING		TIME AT AGENCY		% OF TIME RELATED TO ONCOLOGY	% OF WORK TIME SPENT BY ACTIVITY							FOR TEACHING ACTIVITIES, % OF STUDENTS			
																		TEACHING						
POSITION/ROLE	AGENCY	SCHOOL OF NURSING	ACUTE HOSPITAL	CLINIC/OFFICE	REHABILITATION UNIT	PUBLIC HEALTH DEPARTMENT	VNA	OTHER (EXPLAIN IN FOOTNOTE)	URBAN	RURAL	YEARS	MONTHS		CLINICAL	ADMINISTRATION	RESEARCH	CONSULTING	CLASSROOM	CLINICAL SUPERVISION	CURRICULUM DEVELOPMENT	NURSING STUDENTS	COLLEAGUES	PATIENTS	LAY PERSONS

Appendix H

SAMPLES OF PROJECT MANAGEMENT AND AUDIT INSTRUMENTS

- Process Audit Guide
- Task/Milestone Chart

PROCESS AUDIT VISIT GUIDE

1. Visit date:

2. Project staff interviewed:

3. Project milestones scheduled during this review period:

4. Project activities scheduled to be taking place during this review period:

   a.

   b.

   c.

5. Project activity status:

   a.

   b.

   c.

6. Staffing pattern deviation from contract:

7. Project activity deviation from contract:

8. Contract budget deviation from scheduled expenditures:

9. Problems:

10. Plans to resolve problems:

11. Next scheduled visit date:

H-2

TASK/MILESTONE CHART

Project:________________________

		(Schedule) Months After Start-Up									
Events/ Tasks	Primary Staff Responsible	1	2	3	4	5	6	7	8	9	→
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
↓											

Appendix I

DEBRIEFING INTERVIEW SCHEDULE

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Debriefing Interview

Name ____________________ Date __________

Interviewer __________

Request permission to audiotape interview.

IMPACT

1. Goals
   a. Review goals on admission?
   b. What has been attained?
   c. Have any of your goals changed? In what way?
   d. Did anything that occurred in this program have an effect on your goals?

2. Significant Learnings
   a. What do you think you've learned that will be the most helpful to you?
   b. When, where, and how did you learn this? (e.g., what teaching strategies were the most helpful in learning this?)
   c. What would you have liked to learn that you didn't? Was there an opportunity to learn this? Did you tell anyone you wanted or needed this? What happened?

3. Evaluation of Self
   a. Clinical competency - How competent do you feel in the following areas:
      - Clinical knowledge
      - Standards and protocols
      - Concepts
      - Symptom management

   b. Teaching - How competent do you feel in developing an entire teaching program through all its steps:
      - Management outline
      - Needs assessment
      - Philosophy
      - Conceptual framework
      - Program objectives
      - Content and process identification
      - Implementation
      - Evaluation

How competent do you feel in your ability to transfer the teaching program you developed here to other groups?

c. Administration - How competent do you feel to administer/manage health care delivery for oncology patients? At what level of management?

d. Researcher/Change Agent/Consultant

How competent do you feel about evaluating research in oncology nursing? ______________________________

Implementing research in oncology nursing? __________

Initiating or conducting research in oncology nursing?
____

How competent do you feel in your ability to institute new programs at your agency or to effect other change?
____

How competent do you feel as a consultant in oncology nursing? ______________________________

Oncology nursing education? ______________________

4. Concrete Plans (look for oncology/further education)
   a. What are you going to be doing in the fall?
   b. What kind of position or job opportunities are you seeking?
      Have you made application or interviewed for any of these?
   c. What would you like to be doing in 3 to 5 years? (Probe for role.)
   d. Do you think what you've learned here will help you achieve that objective?
   e. What kinds of other educational programs would you seek to help you attain your objectives? Do you have any plans in this direction?

5. Awareness of Risk Factors
   a. Are you more aware of risk factors for yourself now than at the beginning of the program?
   b. Have you taken any steps to modify any risk factors you have identified?

6. Increased Responsibility/Recognition
   a. Has anything happened that makes you feel that you have gotten more recognition, more responsibility or makes you feel that you are worth more to someone?
   b. What would you like to happen in this area?

7. Other Outcomes (look for serendipitous outcomes)
   a. Has anything beneficial happened to you that you did not anticipate when you came?
   b. Are there negative outcomes from your experience here? To what do you attribute it?

8. Evaluation of the Program
   a. Did the program meet the objectives stated in printed materials? If not, which objectives were not met?
   b. What were your impressions of the faculty and the quality of instruction and supervision? Did you have adequate opportunities to evaluate the program while in progress? What are your thoughts regarding the evaluative tools used during the program? What tools would you like continued? What tools changed?
   c. What do you think of the efforts made by the faculty in helping provide extracurricular support (e.g., housing)?
   d. How could they have been of more help?
   e. Were there adequate clinical/educational experiences and qualified preceptors?

9. Role Transition
   a. Did you have any difficulty making the transition to (direct patient care, teaching)? ____________________
   b. How could we have made this easier for you?
   c. Where would you feel more comfortable practicing as an independent consultant? Why do you feel this way?

10. Summary Evaluation
    a. Would you recommend our program to a friend or colleague? Why or why not?
    b. If you had to do it over, would you come again? Why or why not?

CLOSING

As you know, we will be visiting you for a follow-up interview in 9 months. Please keep records and documentation of everything you do, including products such as papers you've presented or course outlines you've developed.

Where can we reach you in the fall? Who will always know where you are, in case you move? If you change addresses, please notify the Project Office.

Appendix J

REFERENCES USED IN PREPARING KNOWLEDGE TEST

ONCOLOGY

Burkhalter, P. (1978). Dynamics of oncology nursing. New York: McGraw Hill.

Cassileth, B. (1979). The cancer patient: Social and medical aspects of care. Philadelphia: Lea and Febiger.

Cady, B. (Ed.). (1978). Cancer: A manual for practitioners (5th ed.). Boston: American Cancer Society.

Craytor, J., & Bass, M. (1970). The nurse and the cancer patient: A programmed textbook. Philadelphia: J. B. Lippincott Co.

Donovan, M., & Pierce, S. (1976). Cancer care nursing. New York: Appleton-Century-Crofts.

Horton, J., & Hill, G. (1977). Clinical oncology. Philadelphia: Saunders.

Marino, L. (1981). Cancer nursing. St. Louis: C. V. Mosby Co.

Rubin, P. (Ed.). (1978). Clinical oncology for medical students and physicians. University of Rochester, New York: American Cancer Society.

Saunders, C. (1979). Management of terminal disease. Chicago: Year Book Medical Publishing, Inc.

Weisman, A. (1979). Coping with cancer. New York: McGraw Hill.

USDHHS. (1980). Coping with cancer: A resource for health professionals. Bethesda: NIH Publications.

RESEARCH

Abdellah, F., & Levine, E. (1965). Better patient care through nursing research. New York: Macmillan.

Brink, P., & Wood, M. (1978). Basic steps in planning nursing research. North Scituate, MA: Duxbury.

Pavlovich, N. (1978). Nursing research - A learning guide. St. Louis: C. V. Mosby.

Polet, I., & Hungler, B. (1978). *Nursing research: Principles and methods*. Philadelphia: Lippincott.

Treece, E., & Treece, J. (1973). *Elements of research in nursing*. St. Louis: C. V. Mosby.

ADMINISTRATION - LEADERSHIP AND MANAGEMENT

Albrecht, K. (1978). *Successful management by objectives*. Englewood Cliffs: Prentice-Hall.

Douglass, L. M. (1980). *The effective nurse - Leader and manager*. St. Louis: C. V. Mosby Co.

Drucker, P. (1973). *Management tasks, responsibilities, practices*. New York: Harper & Row.

Ehlers, W., Austin, M., & Protero, J. (1976). *Administration for human services*. New York: Harper & Row.

Longest, B. (1976). *Management practices for health professionals*. New York: Reston.

Kast, R., & Rosenzweig, J. (1979). *Organization and management - A systems and contingency approach*. New York: McGraw-Hill.

McCool, B., & Brown, M. (1977). *The management response. Conceptual, technical and human skills of health administration*. Saunders Series in Health Care Organization and Administration. Philadelphia: Saunders.

Odiorne, G. (1969). *Management decisions by objectives*. Englewood Cliffs: Prentice-Hall.

CONSULTANT

Blake, P. (1977). The clinical specialist as nurse consultant. *Journal of Nursing Administration*, *12*, 33-36.

Blake, R., & Moutonm, J. (1976) *Consultation: A comprehensive approach to individual organization development*. Menlo Park: Addison-Wesley.

Kohnke, M. (1978). *The case for consultation in nursing*. New York: Wiley.

Schein, E. (1969). *Process consultation: Its role in organization development*. Menlo Park: Addison-Wesley.

CHANGE

Bennis, W., Benne, K., Chin, R., & Corey, K. (1976). *The planning of change*. New York: Holt, Rinehart, & Winston.

Stone, S., Berger, M., Elhart, D., Firsch, S., & Shelley, B. (1976). *Management for nurses*. St. Louis: Mosby.

Toffler, A. (1970). *Future shock*. New York: Random House.

Appendix K

SAMPLES OF KNOWLEDGE TEST ITEMS

PART A: ONCOLOGY NURSING PRACTICE

Situation H (Questions 49-68)

Virginia Kaplan is a 48-year-old educational psychologist, married, mother of two children, ages 11 and 13. During self-breast examination, she discovered a hard palpable mass and noticeable redness in her left breast. A physical exam and needle biopsy confirmed the diagnosis of inflammatory breast carcinoma with left axillary nodal involvement. An estrogen receptor test was positive. Tumor board recommended initial radiation therapy followed by surgery and chemotherapy. She received 2 weeks of radiation therapy.

A-49 Which of the following is/are true concerning Virginia's case?

1. Her case is atypical because cancer of the breast is usually first detected by mammography.
2. Her childbearing statistic is quite common for this pathology.

   a. 1 is true
   b. 2 is true
   c. Both 1 and 2 are true
   d. Both 1 and 2 are false

A-50 At the time the needle biopsy was done which body systems should have been studied for metastasis?

1. Lungs, liver, bones, and heart
2. Liver, stomach, kidneys
3. Bones, liver, brain, lungs
4. Liver, kidneys, brain, bones

A-51 A positive estrogen receptor assay indicates that Virginia:

1. Will soon experience menopause.
2. Has a greater chance of responding to hormonal manipulation.
3. Has no chance of responding to hormonal manipulation.
4. Will not respond to chemotherapy.

A-53 Which of the following instructions would be included during teaching to assist Virginia with self-care activities during radiation therapy:

1. Avoid physical contact with significant others for the first 24 hours following radiation therapy because of hazardous radiation exposure during that time.

2. Avoid friends who have an elevated temperature.

3. Apply talcum powder or over-the-counter salves to relieve dryness or itching.

4. Avoid shaving under her left arm.

5. Apply warm, moist compresses to radiation site if itching or pain occurs.

a. 1, 3, 5
b. 2, 4, 5
c. 1, 3
d. 2, 4

PART B: ONCOLOGY NURSING EDUCATION

Situation A (Questions 1-10)

Ms. Barbara Bell, inservice education director for a large county health department nursing service, has decided to develop a series of programs in oncology nursing for the staff.

B-1 In determining what the staff see as their knowledge and skill deficits in oncology nursing, Ms. Bell would find it helpful to conduct a:

1. Health fair
2. Formative evaluation
3. Needs assessment
4. Survey of clients

B-2 Ms. Bell bases her decisions about course content on the nurses' knowledge and skill deficits; however, the nurses seem reluctant to enroll in the structured courses which she offers. This reluctance may be an indication of the nurses':

1. Need for self-direction
2. Altered role of learning
3. Vast fund of experiences
4. Fear of failure

B-3 Several of the nurses caring for terminally ill cancer patients talk with Ms. Bell about their experiences and concern regarding the quality of care which they are giving. Ms. Bell realizes that these nurses are exhibiting:

1. A desire to please
2. Expressions of insecurity
3. Experiential readiness
4. Developmental tasks

B-6 Ms. Bell has noted that the nurses participating in the oncology course are discussing specific client problems and spending more time with client families. She interprets this as evidence of:

1. Problem-solving
2. Imitation learning
3. Concept learning
4. Discrimination
5. Affective learning

B-8 Ms. Bell develops two forms of an end-of-course examination by dividing a large pool of test items into two content-parallel versions. Both forms are administered to all learners on the same day. Ms. Bell is trying to determine test:

1. Validity
2. Standardization
3. Usability
4. Reliability

PART C: CONSULTANT, RESEARCHER, ADMINISTRATOR, CHANGE AGENT ROLES

Consultant: Situation A (Questions 6-8)

You have contracted to be a process consultant to a group of staff nurses who are concerned about staffing problems.

C-6 Which of the following values systems would need to be clarified during discussion?

1. Task orientation versus human concerns.
2. Content of the work structure of the organization vs. the process by which work is done.
3. The quantity versus the quality of life for patients on the unit.
4. Short-term ouptput vs. long-term effectiveness.

a. 1, 2, 3
b. 1, 2, 4
c. 1, 4
d. 2, 4
e. All of the above

Researcher: Situation B (Questions 9-15)

You are a nurse educator helping staff nurses on an oncology unit identify frequently occurring phenomena or problems. The staff has elected to study control of pain.

C-12 In writing a hypothesis on pain control, which of the following would you include:

a. Prediction or explanation of the relationship between two or more variables such as age and coping processes.

b. Problem statements related to the relief of pain.

c. Assumptions about the onset, cause and effect of pain.

d. Statistical explanation of how people react to pain.

Administrator

C-30 As a manager, if you expect a delegated task to be performed effectively, you should:

1. Identify the parameters and processes associated with the task.
2. Explain the purpose of the task to the recipient.
3. Give the recipient a general notion of what you want and ask for a creative product or solution.

a. 1, 2
b. 1, 3
c. All of the above
d. 1 only

Change Agent: Situation D (Questions 44-47)

The clinical coordinator and supervisor decide that team nursing is not meeting the needs of the patients and nurses on an oncology unit. They decide to change the approach to care by implementing primary nursing.

C-44 Strategies that would effectively produce the proposed change from team nursing to primary nursing include:

1. Explain how the nurse and clients will gain by the change.
2. Help the nurses develop a positive attitude and philosophy of care toward primary nursing as well as the intellectual knowledge.
3. Convince the nurses that any new innovation would be better than team nursing which leads to fragmentation of care.
4. Explain that to initiate a new mode of care such as primary nursing, the nursing and hospital administraion will have to support the implementation.

a. 3, 4
b. 2, 3, 4
c. 1 only
[✓ d. 1, 2, 4]

Appendix L

EXAMPLES OF ATTITUDE TEST ITEMS

L-1

Examples of Attitude Test Items

Dimension		STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
Oncology Clinical	It is better not to use the word "cancer" when answering questions from cancer clients about their disease.						
Teaching	Negative feedback inhibits learning.						
Consultation	The primary role of a consultant is to provide a solution to a problem.						
Administration	The only legitimate power is that which is delegated from above.						
Research	It is primarily the responsibility of nurse educators to do research in clinical practice.						
Change Agent	If we are to stay first in the field, we have to make frequent changes in our policies and programs.						

Note: Items were not labeled by dimension in the test. Also, these items were not juxtaposed in the test — they were scattered throughout it.

Appendix M

SAMPLES OF SKILLS CHECKLISTS

CRITERIA - BREAST EXAM

*______ Inspects breasts for symmetry with arms at side, raised above head, and with hands on hips.

*______ Inspects for redness, swelling, change in size, and shape.

______ Places small pillow under side being palpated and has patient raise arm above head.

*______ Palpates all areas of each breast in a systematic fashion so that all areas of breasts are covered.

*______ Uses fingers, distal phalanx, with fingers together and flat.

*______ Inspects nipples for discharge, inversion.

______ Palpates area between breast and axilla and then axilla itself.

______ States that BSE should be done every month 1 week after a period or if periods have stopped on a regular day each month.

______ States the reason for regular breast exams.

CRITERIA - IV THERAPY: VENIPUNCTURE

______ Wash your hands.

______ Approach, identify, and explain the procedure to the patient.

*______ Select the site for the venipuncture.

*______ Apply a touniquet around the extremity.

______ Examine the selected vein.

*______ Cleanse site with defatting agent (alcohol).

______ Apply bactericidal agent (betadine).

---

*Critical criteria for successful completion of skill.

M-2

_____ Pick up the needle.

*_____ Insert the needle into the vein.

*_____ Attach the I.V. tubing to the needle.

*_____ Release the tourniquet.

*_____ Tape the needle and tubing in place.

*_____ Regulate the solution flow.

_____ Leave the patient safe and comfortable.

_____ Record the procedure on the patient's record.

---

*Critical criteria for successful completion of skill.

Appendix N

FOLLOW-UP INTERVIEW FORMS

- Fellow Interview
- Head of Agency Interview
- Supervisor/Colleague Interview

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Follow-up Form for Fellow

Fellow's Name: ________________________ Date: ____________

Agency: ___________________ Interviewer: ___________________

Current Job Title: ____

It's been about 9 months since you graduated from the program. As you recall, we want to see how things are going since then.

1a. In which of the following activities are you currently involved and what percentage of your work time is spent in each activity?

	Activity	Percent of Time Spent
___	Nursing administration	____%
___	Supervision of other care providers	____%
___	Teaching	____%
___	Direct patient care of oncology clients	____%
___	Direct patient care of other clients	____%
___	Research	____%
___	Consulting	____%

1b. How does your present salary compare with your salary before you left to attend the program?

___ Less
___ The same
___ More

2. If you are involved in the direct care of patients, which type of patients have you cared for during the past month? (Check all that apply)

a. ___ Patient with leukemia or lymphoma
b. ___ Patient with breast cancer
c. ___ Patient with cancer of the rectum or colon
d. ___ Patient with cancer of the head or neck
e. ___ Patient with gynecological cancer
f. ___ Patient with lung cancer
g. ___ Patient with chemotherapy
h. ___ Patient on radiation therapy

i. ___ Patient with radioactive substance within body
j. ___ Patient who is preop disfiguring surgery
k. ___ Patient who is postop disfiguring surgery
l. ___ Dying patient
m. ___ Patient being prepared for discharge home
n. ___ Patient receiving hyperalimentation
o. ___ Patient with brian tumor
p. ___ Patient with skin cancer
q. ___ Pediatric cancer patient
r. ___ Other? Specify:

3. If you are working primarily with one type of cancer patient, please describe.

4. Are you working on oncology nursing (or oncology nursing education) more now than before taking this program?
____ Yes Check if:

a. ___ Direct patient care
b. ___ Administration
c. ___ Education

____ No

5. Please rate your overall satisfaction with your present position.

a. ___ Very satisfied
b. ___ Satisfied
c. ___ Dissatisfied
d. ___ Very dissatisfied

6. What things about your present position give you the most satisfaction?

7. What things about your present position give you the least satisfaction or are most frustrating?

8. Please describe briefly your opinion of your performance capability in each of the following areas.

a. General clinical skills
b. Teaching skills: classroom
c. Teaching skills: clinical supervision
d. Teaching skills: curriculum development
e. Adminstrative skills
f. Research skills
g. Consulting skills

9. In addition to the summary statement you just made about your capablities in seven performance areas, please rate yourself in each area on a 5-point scale. (INTERVIEWER: READ SCALE)

a. General clinical skills

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

b. Teaching skills: Classroom

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

c. Teaching skills: Clinical supervision

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

d. Teaching skills: Curriculum development

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

e. Administrative skills

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

f. Research skills

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

g. Consulting skills

(1) ___ Definitely outstanding
(2) ___ Above average
(3) ___ Average
(4) ___ Below average
(5) ___ Definitely deficient

CLINICAL SKILLS

10. In the past 6 months have you done any of the following in clinical nursing? Check all that apply and give details below.

a. ___ Developed or helped develop care standards in oncology nursing
b. ___ Revised or helped revise care standards in oncology nursing
c. ___ Made use of other resources for oncology clients, e.g., social worker
d. ___ Acted as an advocate for an oncology client
e. ___ Been involved in client-initiated activities in oncology, such as self-help groups
f. ___ Participated in other oncology nursing-related activities
Specify:____

Details of yes responses:

11. Have any of your personal health habits improved in terms of modifying cancer risk factors you have identified for yourself? (INTERVIEWER: Insert code for answer in front of each risk factor. List additional risk factors the fellow has identified as applicable to self and rate them as well).

Code: 1 = Yes, I am more aware and have modified this
2 = No, I am aware but have not been successful in modifying this
3 = I have always practiced good health habits in this area

a. ___ Smoking
b. ___ Diet
c. ___ Breast exam
d. ___ Pap smear
e. ___ Other (specify) ______________________

12. Do you have any documents to illustrate your achievements in the following areas? (INTERVIEWER: Collect available documents. Check those you obtain).

a. ___ Nursing care standards
b. ___ Your last clinical proficiency rating
c. ___ Nursing care plan (evidence of clinical knowledge)
d. ___ Teaching programs (evidence of clinical knowledge)

TEACHING SKILLS

13. Describe the curriculum development or modification activities you have participated in since returning (or coming) to work here. Did they receive BRN or University approval? Provide documentation, if available.

14. Have you used any of the following teaching strategies since your return (or beginning) to work here? Check all that apply. Describe briefly and indicate your degree of success with each.

	Degree of Success		
	High	Moderate	Low
a. ___ Lecture	___	___	___
b. ___ Case material presentation	___	___	___
c. ___ Learning guides and independent modules	___	___	___
d. ___ Audiovisual aids (including video)	___	___	___
e. ___ Small group (breakaway discussion and feedback to group)	___	___	___
f. ___ Process teaching (nursing process, values clarification)	___	___	___
g. ___ Demonstration (clinical)	___	___	___
h. ___ Hands-on care	___	___	___
i. ___ Preceptor	___	___	___

j. ___ Other? Specify: ______________________

15. Have you been engaged as a preceptor for clinical teaching since returning (beginning) to work here? Yes ___ No ___
If yes, did this involve oncology nursing?
Yes ___ No ___
Give brief details of preceptorship.

Indicate your rating of your ability as a preceptor (any preceptorship).

a. ___ Definitely outstanding
b. ___ Above average
c. ___ Average
d. ___ Below average
e. ___ Definitely deficient

16. Are any of your students seeking to practice oncology nursing? Yes ___ No ___
Describe briefly and give documentation if possible.

17. Are any of your students seeking to obtain further education in oncology nursing? Yes ___ No ___
Describe briefly and give documentation if possible.

18. Have you participated in teaching other health care workers in oncology? Check all that you have done, add others if applicable, and describe briefly (who? what?).
a. ___ Formal university or college courses
b. ___ Continuing education or inservice
c. ___ Rounds
d. ___ Tumor boards
e. ___ Other? Specify: ______________________________
f. ___ ______________________________
g. ___ ______________________________

19. Do you have a copy of your last teaching proficiency rating (if applicable)?

ADMINISTRATION

20. Do you have any kind of document which you used to help you manage your activities or project which you may have been involved with? Any kind of schedule control, time planning, etc. aid?

21. Could you tell me about the ways you use to keep track of and plan your work schedule or projects? (Ask to follow-up on Q.20 or if no document is available.)

22. You earlier rated your competence in administration as being _________________. (INTERVIEWER: Fill in rating from question 9e.) Do you think your participation in the Oncology Nursing Program helped you achieve this level of competency? Yes ___ No ___
Explain:

CHANGE

23. During the time you have been here since you graduated from the Oncology Nursing Program, have you been involved in any activities involving needs assessment or other areas that were directed toward or resulted in a change in the way things were done? Do you have any documentation about this? (Probe for activities in all three areas--clinical, teaching, administration.)
Clinical:
Teaching:
Administration:

24. If yes to 23, how did you go about this? What strategies did you use? How did you involve others? (Probe for identification of and involvement of other facilitators, identification, and handling of inhibitors.)

RESEARCH

25. What kinds of research activities have you been involved with since you graduated from the Oncology Nursing Program? (Probe for: where conducted, topics, field, what prompted the work, with whom was it done, who thought of the idea, awareness of related work, degree of responsibility by the fellow.)

26. What is the status of this work? What is the schedule, etc.?

27. Do you have any documents related to this work?

28. If the work has progressed enough, have you done anything differently because of it?

29. Have you changed the way you do things because of someone else's work that you have read about? (Probe for awareness of other research and act upon it.)

30. You earlier rated your competence in research skills as being ___________________. (INTERVIEWER: Fill in rating from question 9f.) Do you think your participation in the Oncology Nursing Program helped you achieve this level of competency? Yes ___ No ___
    Explain:

CONSULTANT

31. In the past 6 months, how often have you served as a resource to colleagues?

    a. ___ Almost daily
    b. ___ Several times a week
    c. ___ A few times a month
    d. ___ Infrequently
    e. ___ Almost never

    Explain briefly the nature of the resource help you gave to colleagues:

32. In the past 6 months, how often have you counseled others? This includes clients, students, subordinates, colleagues, and others.

    a. ___ Almost daily
    b. ___ Several times a week
    c. ___ A few times a month
    d. ___ Infrequently
    e. ___ Almost never

    Indicate which group of groups of people you counseled:

33. On the following scale, rate your ability to give high quality counseling to others.

    a. ___ Definitely outstanding
    b. ___ Above average
    c. ___ Average
    d. ___ Below average
    e. ___ Definitely deficient

MISCELLANEOUS

34. In the past 6 months, have you been involved in any community programs in oncology? Explain the nature and extent of your involvement. (INTERVIEWER: Read each activity on the list and check if the fellow has done any. Also indicate the nature and extent of involvement in the margin, and obtain documentation if pertinent.)

a. ___ Legislation/policymaking
b. ___ Health programs for industry
c. ___ Environmental programs
d. ___ Citizen action programs
e. ___ Consumer needs assessment
f. ___ Consumer reaction surveys
g. ___ Others? Specify: ______________________________
h. ___ ______________________________
i. ___ ______________________________

35. In the past 6 months have you participated in professional committees of any kind? Yes ___ No ___
Explain the nature and extent of your involvement.

36. Whether or not you have engaged in research in a formal sense, have you conducted any kind of "evaluative" activities--like seeing how well certain activities or changes worked (client care, teaching methods, admission procedures, etc.) Yes ___ No ___

If yes, probe for the following: Tell me about how you did it? Did you have an evaluation plan? Did you develop or use any instruments? Did you prepare a report? Do you have any documentation of these activities that I might have?

37. Please indicate on the list below any publications or presentations made by you since graduating from the Oncology Nursing Program. Describe each briefly (subject, where it appeared or was presented, type of presentation). (INTERVIEWER: Obtain a copy of anything the fellow has available.)

Type of Presentation	Description
a. ___ Publication	
b. ___ Articles accepted for publication	
c. ___ Speeches, papers presented	
d. ___ Poster sessions	
e. ___ Round table discussions, symposia, or panels	
f. ___ Book reviews	
g. ___ Other? Specify: ______________________________	

38. Has there been a change in any of the goals you stated on admission to the program or in your debriefing interview upon graduation? (INTERVIEWER: Let fellow see and review these goals.) Yes ___ No ___ If yes, in what way?

39. In retrospect. what was your most significant learning from the program? What has been the most helpful to you?

40. In retrospect, what would you have liked to learn from the program that you didn't?

41. Do you feel you are fully applying what you learned from the program?
Yes ___ No ___ Explain:

42. In your interview at graduation time, you thought you would be doing ____ in terms of your job. (INTERVIEWER: Review fellow's responses to debriefing questions 4a and 4b and refresh fellow's memory.) Are you currently doing this?

43. What would you like to be doing, in terms of work, 3 to 5 years from now?

44. Do you have plans for further education in oncology?
Yes ___ No ___ Explain:

45. Do you have plans for other professional development?
Yes ___ No ___ Explain:

46. Have you attended continuing education courses in the past 6 months or do you plan to attend any soon?
Yes ___ No ___ Briefly describe the topic of the courses.

47. Do you keep up with the oncology literature? Yes ___
No ___ What journals, type of articles are you reading?

48. Has the nature of the work you do changed since your graduation from the program? (INTERVIEWER: Use checklist below.)

a. ___ Yes, given different assignments
b. ___ Yes, handle assignments in a different way
c. ___ Yes, take initiative in different areas
d. ___ Yes, changed jobs
e. ___ Yes, other reason. Specify: ______________________
f. ___ No basic differences.

Please describe any differences referred to above and indicate whether you feel your participation in the program contributed to the change.

49. Have you received any recognition from supervisors or associates as a result of your participation in the Oncology Nursing Program? Yes ___ No ___ Explain:

50. Are you being sought out by other staff or the community to act as a consultant/teacher/etc.? Yes ___ No ___ Explain:

51. Do you see yourself as a resource for other staff members, colleagues, or the community?
Yes ___ In what way? ___________________________________
No ___ Explain: ______________________________________

52. Since graduation, have there been any additional beneficial outcomes to you of your participation in the program? Yes ___ No ___ Describe:

53. Since graduation, have there been any negative outcomes of your participation in the program?
Yes ___ No ___ Describe:

54. In retrospect, would you recommend our program to a friend or colleague?
Yes ___ Why? ______________________________________
No ___ Why not? ___________________________________

55. In retrospect, would you come again if you had it to do over?
Yes ___ Why? ______________________________________
No ___ Why not? ___________________________________

N-12

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Follow-Up Form for HEAD OF AGENCY

Fellow's Name: ______________________________

Agency: ______________________________ Date: ______________

____

Respondent's Name: ________________ Interviewer: ________

Respondent's Title: ______________________________

I am here to discuss briefly with you the impact on your agency of ______________________'s participation in the Post-Master's Oncology Education Program at ____________ University. It has been about 9 months since she completed the program and has returned to work (begun working) here.

1. (ASK ONLY IF THE FELLOW HAS RETURNED TO WORK AT SAME AGENCY.)

   Has the nature of the work she does changed since her participation in the Oncology Education Program?

   a. ___ Yes, she is given different assignments or courses
   b. ___ Yes, she handles assignments, courses in a different way.
   c. ___ Yes, she takes initiative in different areas
   d. ___ Yes, she changed jobs
   e. ___ Yes, other reason, specify ____________________
   f. ___ No basic differences

   Please describe any differences referred to above. Indicate whether you feel her participation in the program caused the change.

   (ASK ONLY IF THIS IS A NEW AGENCY FOR THE FELLOW.)

   Did her participation in the Oncology Education Program influence her assignment when she came to work here?

   a. ___ Yes, her assignment was primarily a result of that experience
   b. ___ Yes, her experience partially entered into the job assignment decision
   c. __ No, her experience did not enter into the job assignment decision
   d. ___ Other reason, specify ________________________

2. To what extent do you feel her participation in the Oncology Education Program has been valuable to your agency?

1	2	3	4	5
Not at all valuable		Moderately valuable		Very valuable

3. Is there evidence of beneficial or negative outcome from her participation in the Oncology Education Program, either to ____________________ (fellow's name) or to your agency? Describe briefly: (INTERVIEWER: Indicate if beneficial or negative.)

Outcome related to fellow: ______________________________
Outcome related to the agency: __________________________

4. Is she being sought out by other staff or the community to act as a consultant or teacher in oncology? If yes, please give details briefly.

5. Has your agency hired any new oncology staff or started any new oncology programs in the past 6 months? Yes ___ No ___. If yes, describe briefly:

If yes, what was the effect of ________________'s participation in the Oncology Education Program on the activities you described.

a. ___ Considerable influence
b. ___ Moderate influence
c. ___ Slight influence
d. ___ No influence

6. Can you think of any other way in which her participation in the Oncology Education Program has had an impact on your agency?

7. Would you recommend the Oncology Education Program to other staff members or other colleagues?

Yes ___ Why? ____

No ___ Why not? ____

If yes, have you actually done so? Yes ___ No ___
Describe briefly:

N-14

POST-MASTER'S FELLOWSHIP PROGRAM
IN ONCOLOGY NURSING EDUCATION

Follow-up Form for SUPERVISOR/COLLEAGUES

Fellow's Name: ________________________ Date: _____________

Agency: ___________________ Interviewer: ___________________

Respondent's Name: ____

Respondent's Title: ____

I am here to discuss briefly with you the impact on your agency of ____'s participation in the Post-Master's Oncology Education Program _____________________ University. It has been about 9 months since she completed the program and has returned to work (begun working) here.

1a. (ASK ONLY IF THE FELLOW HAS RETURNED TO WORK AT SAME AGENCY).

Has the nature of the work she does changed since her participation in the Oncology Education Program?

a. ___ Yes, she is given different assignments or courses
b. ___ Yes, she handles assignments, courses in a different way
c. ___ Yes, she takes initiative in different areas
d. ___ Yes, she changed jobs
e. ___ Yes, other reason, specify _________________________
f. ___ No basic difference.

Please describe any difference referred to above. Indicate whether you feel her participation in the course caused the change.

1b. (ASK ONLY IF THIS IS A NEW AGENCY FOR THE FELLOW)
Did her participation in the Oncology Education Program influence her assignment when she came to work here?

a. ___ Yes, her assignment was primarily a result of that experience
b. ___ Yes, her experience partially entered into the job assignment decision
c. ___ No, her experience did not enter into the job assignment decision
d. ___ Other, specify ____________________________________

2. Please describe briefly your opinion about ____________'s performance capability in each of the following areas:

   a. General clinical skills
   b. Teaching skills: classroom
   c. Teaching skills: clinical supervision
   d. Teaching skills: curriculum development
   e. Administrative skills
   f. Research skills
   g. Consulting skills

3. In addition to the summary statement you just gave about ________________________'s capability please rate her in each of the following areas on a 5-point scale. (INTERVIEWER: Read scale)

   a. General clinical skills
      (1) ___ Definitely outstanding
      (2) ___ Above average
      (3) ___ Average
      (4) ___ Below average
      (5) ___ Definitely deficient

   b. Teaching skills: Classroom
      (1) ___ Definitely outstanding
      (2) ___ Above average
      (3) ___ average
      (4) ___ Below average
      (5) ___ Definitely deficient

   c. Teaching skills: Clinical supervision
      (1) ___ Definitely outstanding
      (2) ___ Above average
      (3) ___ Average
      (4) ___ Below average
      (5) ___ Definitely deficient

   d. Teaching skills: Curriculum development
      (1) ___ Definitely outstanding
      (2) ___ Above average
      (3) ___ Average
      (4) ___ Below average
      (5) ___ Definitely deficient

   e. Administrative skills
      (1) ___ Definitely outstanding
      (2) ___ Above average
      (3) ___ Average
      (4) ___ Below average
      (5) ___ Definitely deficient

f. Research skills
- (1) ___ Definitely outstanding
- (2) ___ Above average
- (3) ___ Average
- (4) ___ Below average
- (5) ___ Definitely deficient

g. Consulting skills
- (1) ___ Definitely outstanding
- (2) ___ Above average
- (3) ___ Average
- (4) ___ Below average
- (5) ___ Definitely deficient

CLINICAL SKILLS

4. In the past 6 months has ____________________ done any of the following in clincial nursing? Check all that apply and give details below:

a. ___ Developed or helped develop care standards in oncology nursing
b. ___ Revised or helped revise care standards in oncology nursing
c. ___ Made use of other resources for oncology clients, e.g., social worker
d. ___ Acted as an advocate for an oncology client
e. ___ Been involved in client initiated activities in oncology, such as self-help groups, etc.
f. ___ Partcipated in other oncology nursing-related activities
Specify:____

Details of yes responses:

TEACHING SKILLS

5. Please describe the curriculum development or modification activities ______________________________ has participated in since returning (or coming) to work here:

6. Has ____________________________ used any of the following teaching strategies since return (or beginning) to work here? Check all that apply. Describe briefly and indicate degree of success she seemed to have with each.

	Degree of Success		
	High	Moderate	Low
a. ___ Lecture	___	___	___
b. ___ Case material presentation	___	___	___
c. ___ Learning guides and independent modules	___	___	___
d. ___ Audiovisual aids (including video)	___	___	___
e. ___ Small group (breakaway discussion and feedback to group)	___	___	___
f. ___ Process teaching (nursing process, values clarification)	___	___	___
g. ___ Demonstration (clinical)	___	___	___
h. ___ Hands-on care	___	___	___
i. ___ Preceptor	___	___	___
j. ___ Other? Specify: ________________________			

7. Has ________________________ been a preceptor for clinical skills as part of her job duties since coming to (or returning to) work here? Yes____ No____
   If yes, did this involve oncology nursing? Yes____ No____
   Please rate her ability as a preceptor (any preceptorship).

   a. ___ Definitely outstanding
   b. ___ Above average
   c. ___ Average
   d. ___ Below average
   e. ___ Definitely deficient

ADMINISTRATION

8. Does ___________________________'s activities involve or require project management (people, resources, events, etc.)? If so, what is your impression of her skills in these kinds of management activities? (if needed, clarify by mentioning such things as time planning, scheduling, coordinating, budgeting, etc.)

CHANGE

9. Since ______________________ graduated from the oncology program has she been involved in any activities related to the identification of needs or other activities which led to planned change? In what areas? (clinical, teaching, administration)? How would you assess her abilities to conduct these need assessments? What do you think of the techniques, strategies, etc. used? Was resistance met by the project or activity? How did she handle it?

   Clinical:

   Teaching:

   Administration:

RESEARCH

10. We understand that ____________________________ has been involved with some research activities in the area of ____________________. Are you familiar with this? Yes___ No___. If yes, what is your impression of how this research is going? (Probe for extent of involvement, use of others, within or across institutions, value of work, effectiveness as a researcher, etc.).

CONSULTANT

11. In the past 6 months, how often has ______________ (the fellow) served as a resource to colleagues (to the best of your knowledge)?

    a. ___ Almost daily
    b. ___ Several times a week
    c. ___ A few times a month
    d. ___ Infrequently
    e. ___ Almost never

    Explain briefly the nature of the resource help provided by ____.

12. In the past 6 months, how often has ________________ (the fellow) counseled others? This includes clients, students, subordinates, colleagues, and others. Please answer to the best of your knowledge.

a. ___ Almost daily
b. ___ Several times a week
c. ___ A few times a month
d. ___ Infrequently
e. ___ Almost never

Indicate which group or groups of people ________________ has counseled:

13. On the following scale, rate __________________'s ability to give high quality counseling to others.

a. ___ Definitely outstanding
b. ___ Above average
c. ___ Average
d. ___ Below average
e. ___ Definitely deficient

MISCELLANEOUS

14. To what extent do you feel her participation in the Oncology Education Program has been valuable to your agency?

1	2	3	4	5
Not at all valuable		Moderately valuable		Very valuable

15. Is there evidence of beneficial or negative outcome from her participation in the Oncology Education Program, either to ____________________(fellow's name) or to the agency? Describe briefly: (INTERVIEWER: indicate if beneficial or negative.)
Outcome related to fellow: ____________________________
Outcome related to the agency: __________________________

16. Would you recommend the Oncology Education Program to other staff members or other colleagues?
Yes____ Why? ____
No ____ Why not? _______________________________________
If yes, have you actuallly done so? Yes____ No____
Describe briefly:

Appendix O

FORMS FOR EVALUATION OF PRODUCTS

- Field Evaluation - Fellow
- Field Evaluation - Supervisor/Colleague
- External Evaluation

Field Evaluation of Product

Fellow Form

Product ____________________ Site Visit ____________________

Fellow ____________________ Respondent ____________________

1. Was this product solicited? Yes ___ No ___

2. Was the agency supportive? Yes ___ No ___

3. How much did the Post-Master's Program help you to be able to do this?

   ___ Great extent
   ___ Moderate
   ___ Little
   ___ None

4. Considering what the product was supposed to do, how well did it do it?

   ___ Excellent
   ___ Good
   ___ Fair
   ___ Poor

5. What was the impact of your product?

   a. Numbers of people ____

   b. Types of people

   ___ Patients
   ___ RNs
   ___ LVNs
   ___ Others?
   ___ Families of patients
   ___ Students
   ___ MDs

   Specify: ____________________

   c. Dispersal

   ___ Limited (local)
   ___ Broad (regional, national)
   ___ Not yet implemented

6. Attachment is complete Yes ___ No ___
   If no, why?

   ___ No longer available
   ___ Too voluminous
   ___ Reluctant to give it
   ___ Exists only as rough notes/drafts
   ___ Other: ____________________

O-2

Field Evaluation of Product

Supervisor/Colleague Form

Product ____________________ Site Visit ____________________

Fellow ____________________ Respondent ____________________

1. Are you familiar with this product?

   ___ Yes

   ___ No

2. To what extent were you involved in its development?

   ___ Great deal

   ___ Little

   ___ Some

   ___ None

3. Considering what the product was supposed to do, how well did it do it?

   ___ Excellent

   ___ Good

   ___ Fair

   ___ Poor

External Evaluation of Products

Field Evaluation only ___

Product ID ________________
Follow-up: ____ First
____ Second
Fellow Code ________________

Please review the attached document (product) and then rate the product by responding to the following statements. Circle one descriptor for each statement and provide comments to clarify your rating. Use the back of this sheet if you need more room for comments.

1. This product reflects ONF program content COMMENTS:	Great extent	Mod extent	Not at all	Don't know
2. This product addresses an important need at the national level COMMENTS:	Great extent	Mod extent	Not at all	Don't know
3. The content of this product is accurate COMMENTS:		Yes	No	Don't know
4. The content of this product is current COMMENTS:		Yes	No	Don't know
5. The content of this product is complete COMMENTS:		Yes	No	Don't know
6. This product is well-organized COMMENTS:	Great extent	Mod extent	Not at all	Don't know
7. This product could be generalized to other settings COMMENTS:	Great extent	Mod extent	Not at all	Don't know

Appendix P

AGENCY CLIMATE RATING INSTRUMENT

POST-MASTER'S FELLOWSHIP PROGRAM
IN ONCOLOGY NURSING EDUCATION

Agency Profile - Part B

Name of Agency ______________________ Date ______________

You are being asked to help in the program evaluation of a National Cancer Institute project at San Jose State University Department of Nursing (University of Alabama School of Nursing). A former member of your agency has been accepted as a fellow in an experimental post-master's oncology nursing education program. To help us evaluate the success of our program we are obtaining profiles of the agencies from which the fellows come to us, in terms of organizational characteristics such as communication, decision making, problem solving, and climate towards change. This questionnaire is being completed by other people in your agency in order to represent a broad scope of opinion.

Please complete the questionnaire and return it directly to us in the attached preaddressed envelope. To further safeguard the anonymity of your responses, do not sign your name.

For each statement of opinion below, please indicate how much you agree or disagree by circling the appropriate response to the right of the statement. Your answer should represent your own beliefs, not official organization "policy," what you think others would answer, or what you think others would like you to answer. Don't spend too much time deliberating over your answer. Your first reaction is probably the most accurate representation of your opinion.

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
1. We are willing to take risks to accomplish important objectives.	6	5	4	3	2	1
2. Doing things in a different way is valued by our organization.	6	5	4	3	2	1

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
3. Time is rarely scheduled for considering anything new.	6	5	4	3	2	1
4. Our organization has a history of being innovative in programming.	6	5	4	3	2	1
5. At this time, finances and staff workload are such that we should consider nothing new.	6	5	4	3	2	1
6. The idea of having a new oncology education program at our agency would be objectionable to many staff members here.	6	5	4	3	2	1
7. The director (dean or chairperson) is extremely active in his/her search for ideas and ways of doing things.	6	5	4	3	2	1
8. It's been extremely difficult in the past to bring about needed changes.	6	5	4	3	2	1
9. There are opportunities to voice objections to the way problems are solved.	6	5	4	3	2	1
10. Attitudes and opinions of staff are solicited before decisions are made.	6	5	4	3	2	1
11. Group consensus is obtained before making a commitment to a particular course of action.	6	5	4	3	2	1
12. Our previous experiences indicate that most "innovations" are not worth the time or effort.	6	5	4	3	2	1

	STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
13. There is as much upward communication to the director (dean or chairperson) as downward to the staff.	6	5	4	3	2	1
14. Decisions are left vague as to specifically what they are and who will carry them out.	6	5	4	3	2	1
15. There are frequent staff meetings.	6	5	4	3	2	1
16. The director (dean or chairperson) has more influence than anyone else on the way problems are solved.	6	5	4	3	2	1
17. When conflicts over problems come up, the staff works through them rather than avoiding them or smoothing them over.	6	5	4	3	2	1
18. Generally speaking, our staff knows from past experience how to handle stress that occurs when changes are introduced.	6	5	4	3	2	1
19. Our agency systematically reviews decisions and courses of action to determine their effectiveness.	6	5	4	3	2	1
20. Around here, all staff members are consulted about changes in policy or procedure affecting them.	6	5	4	3	2	1
21. Unavoidable courses of action (e.g., mandated by law) are thoroughly explained.	6	5	4	3	2	1

	CONSIDERABLE EXTENT	MODERATE EXTENT	SLIGHT EXTENT	NOT AT ALL
22. To what extent are the following factors supportive of the adoption of new programs at your agency?				
a. Policy at city and county levels	4	3	2	1
b. Economic conditions in local community	4	3	2	1
c. State or federal legislation	4	3	2	1
d. Requirements imposed by professional regulating groups (e.g., accreditation, standards)	4	3	2	1
e. Changes taking place at other agencies	4	3	2	1
f. Attitudes of referring or receiving agencies	4	3	2	1
g. Client needs	4	3	2	1
h. Attitudes of community	4	3	2	1
i. Other: (Specify) ____________________	4	3	2	1
23. To what extent do the following factors facilitate change at your agency?				
a. Harmony of staff relationships	4	3	2	1
b. Adequacy of functioning of programs	4	3	2	1
c. Smoothness of organizational functioning	4	3	2	1
d. Support from administration	4	3	2	1
e. Positiveness of work climate	4	3	2	1
f. Physical proximity of members or units	4	3	2	1
g. Other: (Specify) ____________________	4	3	2	1

	CONSIDERABLE EXTENT	MODERATE EXTENT	SLIGHT EXTENT	NOT AT ALL
24. To what extent do the following factors inhibit change at your agency?				
a. Disharmony of staff relationships	4	3	2	1
b. Inadequate functioning of a program or programs	4	3	2	1
c. Problems in organizational functioning	4	3	2	1
d. Lack of support from administration	4	3	2	1
e. Lack of positive work climate	4	3	2	1
f. Physical segregation or separation of members or units	4	3	2	1
g. Major concerns or crisis	4	3	2	1
h. Other: (Specify) ____________________	4	3	2	1
25. To what extent is there a general need to revise programs at your agency?	4	3	2	1
26. To what extent is there a need at your agency for a new oncology nursing education program:				
a. At the basic nursing preparation level?	4	3	2	1
b. At the master's level?	4	3	2	1
c. In continuing education?	4	3	2	1

P-6

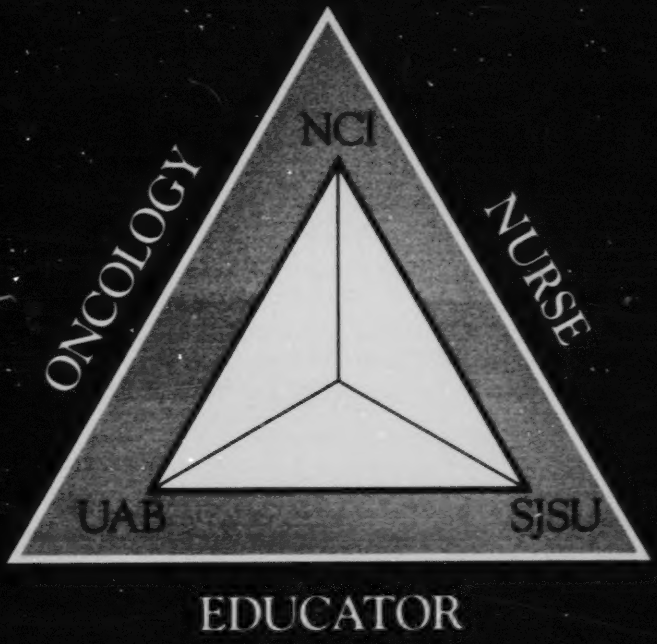
In the following questions, please rate each factor according to your opinion of the status of each factor at your center. First read the brief description in the left- and right-hand column. Then circle the point on the scale that most closely represents your opinion. For example, if in question 27, you feel that there is little participative decision making at your agency and that most (but not all) decisions are made by top administrators, you would circle scale point 2 "mostly."

	COMPLETELY	MOSTLY	MIXED	MOSTLY	COMPLETELY	
27. Decision making Top administrators only	1	2	3	4	5	Participative
28. Communication processes Closed; downward only	1	2	3	4	5	Open; upward as well as downward
29. Division of labor Low degree of division of labor; most staff perform a wide	1	2	3	4	5	High degree of division of labor; staff are
variety of functions	1	2	3	4	5	task specialized
30. Problem solving Procedures do not exist for identifying and solving problems early; many unresolved problems	1	2	3	4	5	Procedures exist and are utilized for identifying and solving problems early; few unresolved problems
31. Resistance to change Agency is highly resistant to change; few program changes in last few years	1	2	3	4	5	Agency is very much open to change; several program changes in last few years

	COMPLETELY	MOSTLY	MIXED	MOSTLY	COMPLETELY	
32. Environment Environment inhibiting change--making it difficult or impossible	1	2	3	4	5	In general, environment supportive of change
33. Previous experience Previous experience with change and innovation unsuccessful and unsatisfying	1	2	3	4	5	Previous experience with change and innovation successful and satisfying
34. Need for change Definite and immediate need for change	1	2	3	4	5	No real need for change

MODEL POST-MASTER'S PROGRAM IN

ONCOLOGY NURSING EDUCATION


NCI
ONCOLOGY
NURSE
UAB
SJSU
EDUCATOR

Developed for:
NATIONAL CANCER INSTITUTE

By:
SAN JOSE STATE UNIVERSITY
San Jose, California

UNIVERSITY OF ALABAMA
Birmingham, Alabama

APPENDIX Q

DEVELOPMENT OF A POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

APPENDIX Q

TO

FINAL REPORT

Reporting Period: September 28, 1979 to June 27, 1984

Contract No. N01-CN-95480

Dorothy Siegele, Project Director

Department of Nursing

San Jose State University

Contract No. N01-CN-95428

Billie Henderson, Project Director

University of Alabama School of Nursing

University of Alabama in Birmingham

Submitted to:

Research Contracts Branch

National Cancer Institute

National Institutes of Health

Bethesda, Maryland 20205

APPENDIX Q

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1. Application Form
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SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

APPLICATION FORM

This form is to be completed and returned to: Dorothy Siegele, R.N., M.S.N.
Oncology Project Director
Department of Nursing
San Jose State University
San Jose, California 95192

Your application to the Post-Master's program will not be considered until this form, your grade transcripts, and three letters of reference have been received.

PART A

1. Date Application Form submitted______________
2. Date you wish to start program______________
3. BIOGRAPHICAL INFORMATION

3.1 Name____
Last First Middle

Other names which may appear on records______________________

3.2 Social Security number______________________________

3.3 Address______________________________________

____

3.4 Telephone______________________________________
Home Business

3.5 Notify in case of accident or illness______________________
Name

Address______________________________

Telephone______________________________

4. PROFESSIONAL INFORMATION

4.1 California Registered Nurse License - Yes_____ No_____

If yes, License number____________Date of expiration____________

4.2 Other states in which you are licensed as a Registered Nurse

State_________Number_________Date of expiration______________

____

4.3 California Pulbic Health Nurse Certificate - Yes_____ No_____

Date received______________

4.4 Other credentials or certificates____________________

5. PROFESSIONAL REFERENCES (Please list the three people you have asked to send letters of reference.)

5.1____________________
Name Address Professional Relationship

5.2____________________
Name Address Professional Relationship

5.3____________________
Name Address Professional Relationship

6. PROFESSIONAL EMPLOYMENT BACKGROUND (Begin with your present or last position and describe positions held for past 5 years. Include a one sentence description of your responsibilities in each position. Add additional pages if not enough space is provided.)

6.1 Dates of employment____________________
Name of Agency____________________
Location____________________
Title or Position____________________
Description of Responsibilities____________________

6.2 Dates of employment____________________
Name of Agency____________________
Location____________________
Title or Position____________________
Description of Responsibilities____________________

6.3 Dates of employment____________________
Name of Agency____________________
Location____________________
Title or Position____________________
Description of Responsibilities____________________

7. EDUCATIONAL BACKGROUND

7.1 Baccalaureate degree in nursing received from ______________________
Name of School

Location ____

Date of graduation ______________________________________

Was the program NLN accredited? Yes_____ No _____

7.2 Upper division statistics course completed at ______________________
Name of School

Date of completion____________Grade received______________

7.3 Grade point average in upper division undergraduate work based on either 60 semester units or 90 quarter units__________________________.

Check the scale used to determine grade point averages at your school:

_____ 2 Point scale
_____ 3 Point scale
_____ 4 Point scale
_____ Other (specify)__________

7.4 Master's degree in Nursing - Yes______ No ______

If yes, Name of school __________________________________

Location ____

Date of graduation ______________________________________

Was the program NLN accredited? Yes_____ No _____

7.5 Master's degree in another field? Yes_____ No______

If yes, Name of field ___________________________________

Name of school ____

Location ____

Date of graduation ______________________________________

PART B

The following information is essential to construct a profile of the characteristics of the fellows enrolled in the post-master's oncology program. Data will also be used to help assess individual needs. Please complete all sections of this survey. Add additional pages if not enough space is provided.

1. General Information

1.1 Sex: female_____ male_____

1.2 Age: 20-24____25-29____30-39____40-49____50-59____60 and above____

2. Professional Organizations

____

____

____

____

3. Community Activities Related to Health

____

____

____

____

____

4. Nursing Education

4.1 Basic nursing education: Diploma____ AA/AD____ BS/BSN_____

4.2 Graduate degrees earned:

4.21 MS_____MSN______

Functional Area(specify)________________________________

Clinical Area (Specify)________________________________

Practice Teaching experience Yes _____ No _____

Teaching Strategies Course Yes_____ No _____

Assessment Course Yes_____ No _____

4.22 Other degrees or certificates:

Ph.D (specify area)__________________ DNSc ____________

Nurse Practitioner (specify area) ____________________

Other (specify) _________________________________

4.3 Special courses or programs in oncology nursing:

check appropriate box

Course/Program	Degree Course work	Post-Baccalaureate	Post-Master's	Continuing Education

5. Nursing Experience

	Approximate length of experience		Position or Role	Setting	
	Years	Months		Rural	Urban
5.1 Clinical:					
5.11 acute hospital					
5.12 community agency					
5.2 Teaching: 5.21 classroom					
5.22 clinical					

5.23 check types of students you have taught:

nursing students ______
colleagues ___________
lay people ___________
patients ___________

(Use same heading as above)

5.24 Curriculum development					
5.3 Administrative: 5.31 acute hospital					
5.32 community agency					

6. Oncology Nursing Experience

6.1 Work setting:

	Approximate length of experience		Position or Role	Setting	
	Years	Months		Rural	Urban
6.11 school of nursing					
6.12 acute hospital					
6.13 clinic/office					
6.14 rehabilitation unit					
6.15 public health dept.					
6.16 VNA					
6.17 Other (specify)					

6.2 Specific oncology patient experience: Check only if you have had 6 months or more experience.

6.21 child______________
adult 18-65________
65 +________

6.22 lung______________
GI (esophagus, gastric, small intestine, colon, rectal)____________
GU/GYN_____________
breast_____________
head & neck________
leukemia/lymphoma_______
other (specify)________

6.3 Area of clinical expertise/theoretical knowledge related to oncology:

Check only if you have had updated knowledge to maintain expertise within the last 5 years.

chemotherapy___________
immunotherapy__________
primary care___________
research related to oncology__________
hospice__________
cancer pathology/physiology__________
terminal care__________
rehabilitation __________
psychosocial __________

radio therapy________
surgery ________
other ________

6.4 Oncology protocols:

6.41 Indicate involvement you have had with oncology treatment protocols:

Planning____________
Utilization__________
other (specify)______

Describe your experience:____
____
____

6.42 Do you anticipate future involvement with oncology treatment protocol?

Yes _____ No _____

If yes, describe ____________________________________
____
____

6.5 Please check all areas in which you wish to gain expertise during the fellowship program:

chemotherapy_________
immunotherapy________
primary care ________
research ____________
hospice ____________
cancer pathology/physiology_______
terminal care________
rehabilitative care______
psychosocial aspects_____
other __________________

radio therapy________
surgery ________

Circle your three priorities in the areas you checked above.

7. Research

7.1 Indicate involvement you have had with research related to oncology:

Planning__________
Carrying out______
Analyzing data_____

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Using research findings_______

Other (specify)__________

Describe your experience: ______________________________

____

____

7.2 Do you anticipate future involvement with oncology research?

Yes _____ No _____

If yes, describe______________________________

____

____

8. Describe areas in which you will be teaching, working, and/or involved after completing this program:

9. GOALS

Write and attach a statement of purpose outlining the goals and objectives you wish to achieve by the completion of The Post Master's Oncology Program.

______________ *
date

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

REQUEST FOR EMPLOYMENT VERIFICATION

TO: ____

____

____

____

REGARDING: ______________________________

Position held: ______________________________

Dates worked in position: __________ from __________ to

FROM: ______________________________ Project Director

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

____

____

____
Phone

The following information will be used only for research purposes and will not be part of any official personnel records.

____________________ is a fellow in the Post-Master's Fellowship Program in Oncology Nursing Education at ______________________. So that we can more effectively evaluate the effects of the program, we would appreciate your answering questions about this person and the job duties performed in the postiion listed above. Thank you for your cooperation. Please be assured that your responses will be held in the strictest confidence and will be used only for research purposes.

1. Is the information about the position title accurate? ______ Yes ______ No
   If No, what is the correct title? ______________________________
2. Are the dates of employment for this posotion accurate? _____ Yes _____ No
   If No, what are the correct dates? __________ from __________ to

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3. What were the major responsibilities associated with this position as performed by this individual? ______________________________

____

____

____

4. What was your professional relationship with this individual during this time?

_____Immediate supervisor   __________Colleague

_____Other: ____________________

5. Please complete the following information about this position as performed by this individual:

a. Type of agency in which this position was located:

______school of nursing

______acute hospital

______clinic or office

______long-term care facility

______visiting nurse association

______public Health Department

______other: (Please describe)______________________________

b. Agency setting

______urban (over 20,000 population and many available health care resources)

______rural (less than 20,000 population and few available health care resources)

c. Percent of position duties related to oncology:__________%

d. Percent of work time spent on the following activities:

______% clinical

______% administration

______% research

______% consulting

______% teaching: classroom

______% teaching: clinical supervision

______% teaching: curriculum development

e. If teaching activities were involved, what percent of the students were:

______% nursing students

______% colleagues

______% patients/clients

______% lay persons

______% other: __________________

6. Please write a brief statement about this individual's performance in the areas listed below:

a. general clinical skills

____

____

____

b. teaching skills: classroom

____

____

____

c. teaching skills: clinical supervision

____

____

____

d. teaching skills: curriculum development

____

____

____

e. administrative skills

____

____

____

f. research skills

____

____

____

g. consulting skills

____

____

____

7. In addition to the summary statement you provided in Item 6, please rate this individual in each of these same areas:

a. general clinical skills

_______definitely outstanding

_______above average

_______average

_______below average

_______definitely deficient

b. teaching skills: classroom

_______definitely outstanding

_______above average

_______average

_______below average

_______definitely deficient

c. teaching skills: clinical supervision

______definitely outstanding

______above average

______average

______below average

______definitely deficient

d. teaching skills: curriculum development

______definitely outstanding

______above average

______average

______below average

______definitely deficient

e. administrative skills

______definitely outstanding

______above average

______average

______below average

______definitely deficient

f. research skills

______definitely outstanding

______above average

______average

______below average

______definitely deficient

g. consulting skills

______definitely outstanding

______above average

______average

______below average

______definitely deficient

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Agency Profile - Part A

Name of Agency ______________________________ Date ________________

Address: Street ____

City ________________ State ____________ Zip Code ____________

Name of Person completing this form ____________________________________

Position ____________________________ Telephone No. ________________

1. Control of agency

___ Public

  ___ City/County

  ___ State

  ___ Federal

___ Private

  ___ Nonprofit

  ___ Proprietary

2. Type of agency (check one)

___ Educational (Please answer questions 3 through 7)

___ Direct Health care provider (Please answer questions 8 through 17)

___ Both (Please answer all the remaining questions that are applicable)

___ Other, Specify ________________ (Please answer all remaining questions that are applicable)

Educational Agencies (Answer questions 3 through 7)

3. Check those educational programs that you offer.

___ Basic nursing preparation

___ Master's

___ Postmaster's

___ Continuing education

___ In service education (for teaching staff)

___ In service education (for nursing staff)

4. Please characterize the degree of interest and support from administration for curriculum development and educational program implementation. Would you say there is:

   ___ Considerable support

   ___ Moderate support

   ___ Slight support

   ___ Almost no support

   Comments:

5. Describe briefly your resources for the implementation of new programs in education:

   a. funds

   b. facilities

   c. qualifications of current staff

   d. Number of staff

6. Are specific oncology courses currently being taught at your agency?

   ___ Yes

   ___ No

   If yes, please list briefly the course titles below and indicate for what level of student they are intended.

Course Titles	Student for whom intended

7. Are specific oncology courses being planned for the next two-year period:

   ___ Yes

   ___ No

   If yes, please describe briefly below.

Course Title	Students for whom intended

Direct Health Care Provider Agencies (Answer questions 8 - 17)

8. Please indicate the type of agency you principally are and the number of clients you serve. Check only one agency type.

Type of Agency	Number of Clients
____ In-patient care	Average daily census ____________
____ Clinic or other out-patient care	Daily case load ______________
____ Home care	Daily case load ______________
____ Other, Specify____________	Number of clients per day _______

9. What is the total size of your nursing staff? (Please convert to full time equivalents.) ______________

10. What is the breakdown of your nursing staff (in full time equivalents)?

Type of staff member	Number in full time equivalents
R.N.	____________________________
Practical or vocational nurse	____________________________
Aides or attendants	____________________________
Other, specify	____________________________

11. What is the nursing staff: patient ratio? ____________________________

12. Is your agency accredited?

____ Yes, By whom? ________________

____ No

13. Describe briefly your resources for the implementation of new programs in patient care:

a. funds

b. facilities

c. qualifications of current staff

d. number of staff

14. Please characterize the degree of interest and support from administration for implementation of new programs in patient care. Would you say there is:

____ Considerable support

____ Moderate support

____ Slight support

____ Almost no support

Comments:

15. Do specific oncology patient care facilities exist at your agency (e.g. clinic, patient care unit, hospice, etc.)?

____ Yes. Please specify types of units that exist ________________

____

____

____ No.

16. Are specific oncology patient care facilities being planned for the next two-year period?

____ Yes. Please specify type of units being planned ________________

____

____

____ No.

Thank you for your assistance in our Program Evaluation.

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Staff Debriefing Interview Guide

Name ______________________________ Date ________________

Interviewer ________________

1. Faculty; impression of program --

   a. reaction to courses: (student response, student involvement, expectations for course, improvements) Obtain by course if appropriate. Obtain overall impressions as well.

   b. reaction to instructional strategies used : (appropriateness for student group, effectiveness) Obtain by strategy if appropriate, overall impression as well

c. reaction to program in general : is Post-masters appropriate for goal of program?

d. reaction to student population and appropriateness: (~~what suggestions:~~ ~~type of student best for program,~~) student characteristics which are important for success see 3b.

2. Faculty: satisfaction --

a. What learned from experience and how they feel about their experience

b. job satisfaction--probe for level of satisfaction with structure and and control, opportunity for creativity, curricula flexibility, amount of work to be done in period of time available

3. Faculty: suggested changes : courses, student population, strategies, etc.

a. courses

b. students

c. strategies

d. other: list area and comments

____________________:

____________________:

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

PART A: ONCOLOGY NURSING PRACTICE KNOWLEDGE TEST

DIRECTIONS: PLEASE READ CAREFULLY

1. Use answer sheet. Complete all requested information.
2. Choose the best (most complete) answer unless otherwise indicated. One answer per question.
3. Use a number 2 pencil for answers: MAKE YOUR MARKS DARK. Check your cards before handing them in.
4. Erase cleanly.
5. Use a pen or regular pencil to fill in your name and other information ON EACH ANSWER CARD.
6. Check the examination for missing pages. Last page will be marked "THE END".

****

Situation A: (Questions 1 - 5)
You are reviewing the 1980 Cancer Facts and Figures booklet published by the American Cancer Society.

A-1. The booklet states that the overall incidence of cancer has increased between 5 and 10% in the U.S. from 1970-1979. This statement means:

- a. The number of new cases of cancer per 100,000 U.S. population has risen 5 - 10% in the past 9 years.
- b. The total number of persons per 100,000 population who have a diagnosis of cancer has increased 5 - 10% in the past 9 years.
- c. The percentage of cases of malignant tumors in reference to all types of growths has increased 5- 10% in the past 9 years.
- d. There are 5 - 10% more people living with cancer than dying from the disease in a given year.

---

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FIGURE 1

25-Year Trends in Age-Adjusted Cancer Death Rates Per 100,000 Population 1950-52 to 1975-77

Sex	Sites	1950-52	1975-77	Percent Changes	Comments
Male	All Sites	131.1	162.3	+ 23.8	Steady increase mainly due to lung cancer.
Female	All Sites	118.9	107.9	− 9.3	Slight decrease.
Male	Bladder	5.1	4.9	*	Slight fluctuations; overall no change.
Female	Bladder	2.2	1.4	− 35.1	Some fluctuations; noticeable decrease.
Male	Breast	0.3	0.3	*	Constant rate.
Female	Breast	22.0	23.2	+ 0.6	Slight fluctuations; overall no change.
Male	Colon & Rectum	19.4	19.0	− 2.1	Slight fluctuations; overall no change.
Female	Colon & Rectum	18.9	14.9	− 19.5	Slight fluctuations; noticeable decrease.
Male	Esophagus	3.6	4.3	+ 19.0	Some fluctuations; slight increase.
Female	Esophagus	.9	1.2	*	Slight fluctuations; overall no change in females.
Male	Kidney	2.8	3.7	+ 32.1	Steady slight increase.
Female	Kidney	1.6	1.8	*	Slight fluctuations; overall no change.
Male	Leukemia	6.5	6.9	+ 6.2	Early increase, later leveling off.
Female	Leukemia	4.6	4.1	− 8.7	Slight early increase, later leveling off and decrease.
Male	Lung	18.3	56.7	+210.6	Steady increase in both sexes due to cigarette smoking.
Female	Lung	3.9	14.0	+263.3	
Male	Oral	4.7	4.8	*	Slight fluctuations; overall no change in both sexes.
Female	Oral	1.2	1.6	*	
Female	Ovary	7.0	7.3	+ 4.3	Steady increase, later leveling off.
Male	Pancreas	6.5	8.4	+ 29.2	Steady increase in both sexes, then leveling off. Reasons unknown.
Female	Pancreas	4.2	5.2	+ 23.8	
Male	Prostate	13.3	13.9	+ 5.3	Fluctuations all through period; overall no change.
Male	Skin	2.3	2.8	*	Slight fluctuations; overall no change in both sexes.
Female	Skin	1.5	1.6	*	
Male	Stomach	17.6	6.8	− 61.2	Steady decrease in both sexes; reasons unknown.
Female	Stomach	9.3	3.2	− 65.6	
Female	Uterus	18.2	7.4	− 59.3	Steady decrease.

*Percent changes not listed because they are not meaningful.

A-2. According to Figure 1, the cancer site which has the greatest percent increase in mortality for women is cancer of the:

a. lung
b. ovary
c. breast
d. uterus

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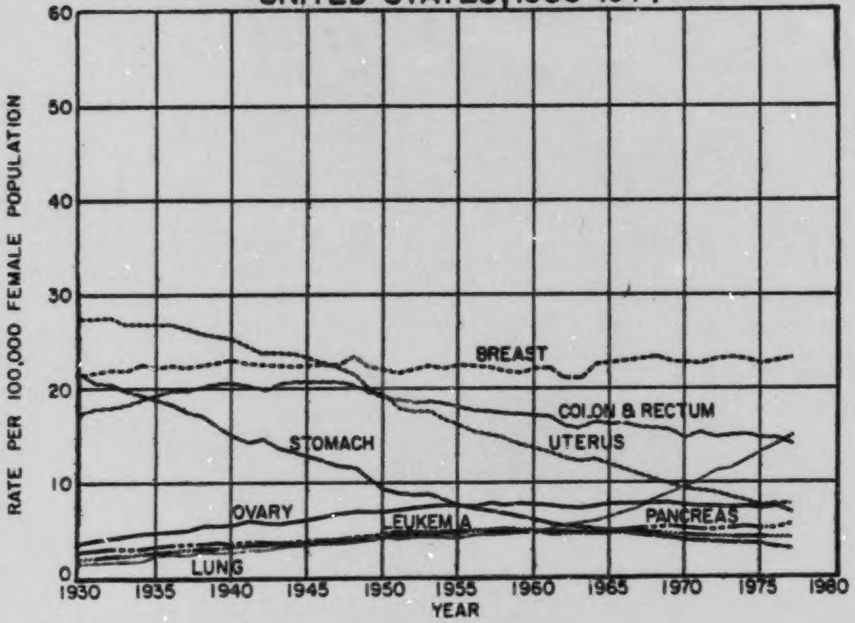
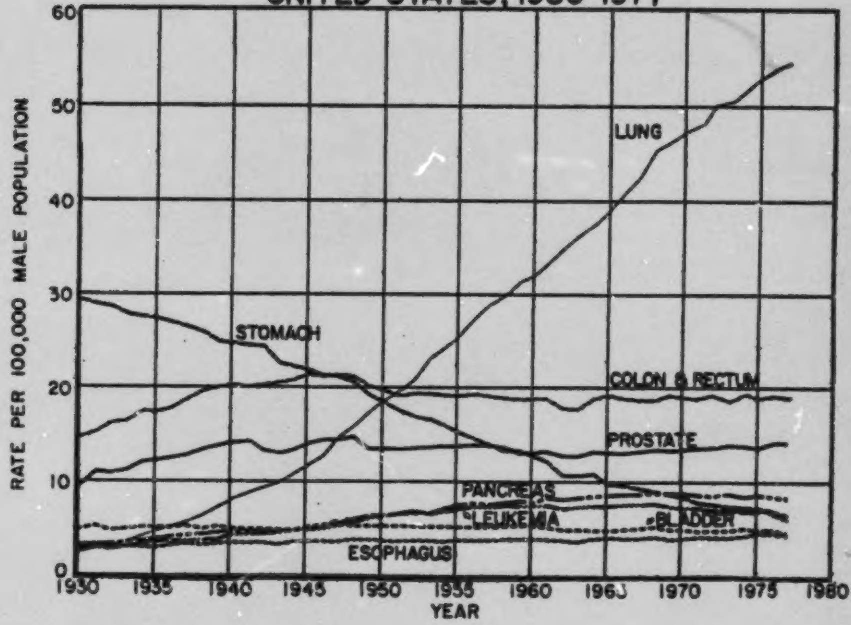
FIGURE 2



FEMALE CANCER DEATH RATES* BY SITE
UNITED STATES, 1930-1977

*Rate for the female population standardized for age on the 1940 U.S. population. Sources of Data: National Vital Statistics Division and Bureau of the Census, United States.

FIGURE 3



MALE CANCER DEATH RATES* BY SITE
UNITED STATES, 1930-1977

*Rate for the male population standardized for age on the 1940 U.S. population. Sources of Data: National Vital Statistics Division and Bureau of the Census, United States.

A-3. In the period 1930-1977, the death rate for males has decreased most for cancer of which site (see figure ~~2~~3):

a. bladder
b. pancreas
c. colon - rectum
d. stomach

A-4. Which of the following inferences can you make from Figure 2 & 3?

1. There are significantly fewer deaths due to cancer of the stomach in both sexes during the past 47 years.
2. There were fewer deaths per 100,000 population from cancers of the female reproductive organs during 1965 - 1975.

a. both are true
b. both are false
c. 1 is true, 2 is false
d. 1 is false, 2 is true

A-5. Identify from the cancer morbidity statistics in Figure 2 and 3 a specific site regardless of sex, in which there has been a significant rise in the number of deaths. This finding suggests nurses should attempt to alter risk factors associated with:

1. Working in an environment with asbestos
2. low fiber diet
3. smoking 2 packs of cigarettes per day for 15 years
4. high cholesterol diet

a. 1, 3
b. 2, 4
c. 1, 2, 3
d. 4 only
e. 1, 2, 3, 4

Situation B: (Questions 6 - 8)

A research report has studied men between 50 - 65 years of age who smoke 1-2 packages of cigarettes each day and have had symptoms of cough, wheezing, and right upper chest pain for one month. These men were studied over a five-year period to determine how many of them developed lung cancer.

A-6. The principal reason for concentrating efforts of cancer detection in this population rather than on the total population is that:

a. it is easier to convince these groups to be examined
b. professional ethics require we do what we can for these people
c. it is possible to assemble members of high-risk groups at given location
d. it is more economical since there are more positive findings for the dollars invested

A-7. Which of the following interview questions would be most valuable in detecting the greatest risk factor associated with this population?

a. How many cigarettes do you smoke a day?
b. Have you ever stopped smoking? If so, for how long?
c. Have you ever been told you have bronchitis?
d. Do you cough up a lot of mucus each morning?

A-8. From the following variety of methods which could be used to determine if any of these men developed lung cancer, which is the only certain one?

a. cytological smear
b. combination of x-ray, serum enzyme studies, and radioactive isotope scans
c. histological examination
d. complete body scan

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A-9. The incidence of colon cancer has increased in people with which of the following risk factors?

1. a history of ulcerative colitis
2. a diet high in protein
3. a history of multiple rectal polyps
4. a diet causing constipation

a. 1, 3
b. 2, 3
c. all but 2
d. all but 3
e. all the above

A-10. Which of the following early cancer detection methods would be most appropriate for a nurse to teach a 50 year old male who frequently bleeds as a result of internal hemorrhoids?

- a. teach monthly self examination of prostate and lower rectum for lumps or tender areas.
- b. have client guiac stools every month.
- c. discuss financially sound means of having a proctoscopy done yearly.
- d. when bleeding occurs take a stool specimen to the doctor for analysis.

A-11. Situation C: One of your clients Mrs. S. who is 60 years old has a lump in her breast. Her health history includes:

1. sister had breast cancer.
2. her only child was born when she was 30.
3. she had mastitis when breast feeding her child.
4. her diet is high in carbohydrate.
5. she has diabetes in the family.

Which of the above are considered cancer risk factors for Mrs. S.?

- a. 1 only
- b. 1, 2
- c. 1, 3, 4
- d. 2, 3, 4

A-12. Which of the following statements is/are true concerning hormonal changes relating to cancer of the breast and prostate?

1. Persons whose progesterone levels are not interrrupted by pregnancies are more at risk for some breast cancers.
2. Persons with low estrogen levels are given birth control pills as a preventative measure to counteract the cancer risk factor of amenorrhea.
3. The hormonal alterations which occur with aging influence the risk of developing prostatic cancer.

- a. 1, 2
- b. 1, 3
- c. 2, 3
- d. 1 only
- e. 3 only

A-13. Which of the following approaches would be most appropriate when you discover an individual is a high risk candidate for cancer of the cervix?

1. Tell the individual to make an appointment as soon as possible with an oncologist at nearby multi specialist clinic for a complete workup.
2. Discuss with the individual the specific factors in her health history which make her a high risk candidate.
3. Ask the individual if she has any particular concerns about her health and how often she has a physical, pelvic exam and pap smear.
4. Tell the person you would like to follow her case for the next couple of years to see if any problems develop.

a. 1, 4
b. 1, 3, 4
c. 2, 3
d. all of the above

A-14. Situation D: You are taking a history on a person with the following symptoms:

. cervical adenopathy
. dysphagia
. pain radiating to the ear
. eructation following meals
. weight loss

From the clinical picture, which of the following conditions is strongly suspected:

a. pharyngeal cancer
b. esophagel cancer
c. cancer of the lung at the hiatus
d. lymphoma

A-15. Which of the following statements are true concerning cancer of the bladder?

1. Cancer of the bladder is the most common cancer in men over 50 years old.
2. Aniline dye, cigarette smoking, and chronic bladder infections may be etiologic in cancer of the bladder.
3. Clinical presentation may include hematuria, frequency and dysuria.
4. Urinary antibiotics, combination chemotherapy and radiotherapy are the treatments of choice.

a. 1, 2
b. 1, 3
c. 2, 3
d. 2, 3, 4

A-16. Cancers of the following sites have specific preventable measures:

1. oral cavity
2. breast
3. cervix
4. bone

a. 1, 2
b. 1, 3
c. 2, 3, 4
d. 1, 3, 4

A-17. To promote cost effectiveness in planning community teaching programs, the following group would be selected for a campaign on prevention of skin cancer:

a. persons over 60
b. farmers
c. persons 24 - 32 who are light skinned
d. bus drivers

A-18. Which of the following statements concerning genetics is/are true?

1. Cancer is as common in individuals with cytogenetic defects as it is among normal individuals.
2. Certain cancers, such as retinoblastoma, have been found to be inherited as a dominant characteristic.
3. Some families exhibit an increased incidence of one or more types of neoplasms.
4. Recessive genes for cancer may interact with environmental factors to increase the probability of cancer.

a. 1, 4
b. 1, 2, 4
c. 2, 3, 4
d. all of the above

A-19. Emotional stress, local tissue injury, advancing age and debilitating disease sometimes precede or are associated with the first evidence of cancer. Documentation of this occurence emphasizes a difference in host resistance:

a. between persons with differenct cultural and racial background.
b. between persons of different sexes and ages.
c. in the same individual at different times.
d. in individuals within the same family depending upon genetic factors.

A-20. Which of the following statements concerning neoplasms is not true?

a. is a collection of altered cells that responds poorly (if at all) to body control mechanisms.
b. is a new growth that arises by transformation of one or more normal body cells.
c. may actually be a group of related diseases without a single etiology.
d. usually undergoes regression when all causative factors are removed.
e. serves no useful function; is usually deleterious and may have fatal consequences.

A-21. The most important characteristic of tumor cells is the:

- a. inability to respond to normal regulatory controls.
- b. ability to increase the rate of cell mitosis.
- c. inability to secrete toxins locally.
- d. ability to produce tissue hemorrhage and necrosis.

A-22. Tumors are described as malignant because of their ability to:

1. Invade tissue
2. Metastasize to new sites
3. Secrete lethal amounts of hormone
4. Form well-differentiated cells

- a. 1, 2, 3
- b. 1, 3
- c. 2, 4
- d. 4
- e. 1, 2, 3, 4

A-23. Rapidly growing malignant tumors frequently become necrotic at the center. This is usually due to:

- a. the strong immunologic response they provoke.
- b. the accumulation of neutrophils at the center, with the subsequent release of their proteolytic enzymes.
- c. the ease with which neoplastic tissue is infected by opportunistic pathogens.
- d. incidental trauma.
- e. lack of adequate stroma and blood supply.

A-24. The physician's note states the client has a grade IV cervical cancer. He is referring to:

- a. the extent of the disease.
- b. the magnitude of response to the treatment.
- c. the general performance capacity of the client.
- d. the degree of histologic anaplasia of the tumor cells.
- e. the presence of abnormal cells on a Papanicolaou smear.

A-25. The term sarcoma denotes the cancer developed in the:

a. Lymphoid tissue
b. Epithelial tissue
c. Hematopoietic tissue
d. Non-hemotopoietic mesenchymal tissue

A-26. Which of the following statements are true concerning spread and complications of malignant neoplasma?

1. a common route of metastasis of cancer cells is infiltration of adjacent tissue.
2. the person with a malignancy frequently develops symptoms associated with anabolism.
3. major complications often associated with malignant neoplasms are local ulceration, infection and hemorrhage.
4. carcinogenic diseases stimulate antigen production, which triggers inflammation and leads to increased tumor growth and metastasis.

a. 1, 2, 3
b. 1, 3, 4
c. 1, 3
d. 2, 4
e. all of the above

A-27. In addition to tumor removal the major reasons for doing surgery on clients with cancer are:

1. To produce local responses within involved tissues which makes them more sensitive to chemotherapy and radiation.
2. To relieve symptoms created by functional disturbance in body system.
3. To remove scar tissue thereby improving the individuals' appearance.
4. To perform a diagnostic or staging procedure.

a. 1, 2
b. 2, 4
c. 1, 2, 4
d. 2, 3, 4
e. all of the above

A-28. Which of the following statements are true regarding the use of radiation therapy in the treatment of cancer?

1. A primary treatment modality for the regression or control of localized tumor growth.
2. Following surgery as a preventive modality to reduce the possibility of local recurrence.
3. A palliative treatment modality for the relief of symptoms.
4. A treatment of widespread effectiveness in the control of metastatic systemic disease.

a. 1, 3
b. 2, 4
c. 1, 2, 3
d. 2, 3, 4

A-29. Effective radio therapy results in:

1. Damage to malignant cells.
2. Alteration of cellular metabolism during the mitosis phase only.
3. Liquification of the necrotic core of the cancer cell.

a. 1, 2
b. 1, 3
c. 2, 3
d. 1 only
e. 2 only

A-30. Which of the following statements are true regarding radiation therapy?

1. Low voltage machines are considered "skin-sparing" as compared to super voltage machines.
2. When a client's chart states that he was given a radiation dose of 250 rads, you know this is the absorped dose of ionizing radiation.
3. The necrotic core of a tumor is more radiosensitive then the outer edges because of the lack of oxygenation and nutrition.
4. Radiation therapy utilizing gamma rays produces an effect similar to that of alkylating agents, which prevent the replication of DNA.

a. 1, 3, 4
b. 1, 2, 3
c. 2, 4
d. 2, 3, 4

A-31. Radio therapy and chemotherapy have the following physiologic effects in common:

1. The best time to treat the malignancy is when the cells have reached the undifferentiated state.
2. The most damage is done during the synthesis and mitosis phases of the cell cycle.
3. The effects at a cellular level are on rapidly dividing, highly differentiated cells.

   a. 1 only is true
   b. 2 only is true
   c. 1 and 2 are true
   d. 2 and 3 are true
   e. all are true

A-32. Normal cells that are most susceptible and sustain the greatest degree of damage from chemotherapy are:

1. bone marrow cells
2. nerve and muscle cells
3. hair follicle cells
4. epithelial cells of GI tract

   a. 1, 3
   b. 2, 4
   c. 1, 2, 3
   d. 1, 3, 4

A-33. Although each chemotherapeutic drug has a different mechanism of action, the basic principles(s) underlying chemotherapy treatment can best be described as:

1. destroying the cells' ability to exchange and utilize oxygen, resulting in cell death.
2. inhibiting the production of cellular enzymes necessary for cell growth.
3. interfering with DNA synthesis and mitosis and subsequently inhibiting cellular reproduction.
4. decreasing cell membrane permeability and the ability of the cell to regulate normal exchange mechanism.

   a. 1 only
   b. 3 only
   c. 2, 4
   d. 1, 3

A-34. Which of the following signs and symptoms are indicative of chemotherapy toxicity to normal cells?

1. nausea and vomiting up to 48 hours after treatment.
2. change in color of stools.
3. alopecia.
4. vaginal mucositis.

a. 1, 2, 4
b. 1, 3
c. all of the above
d. 1, 3, 4

A-35. The advantage of administering platelets instead of giving a blood transfusion would be:

1. reactions are unlikely.
2. there is less strain on the cardiovascular system.
3. type and cross-match is not necessary.

a. 1, 2
b. 1, 3
c. 2, 3
d. 1 only
e. 2 only

Match each of the following drugs with its potential side/toxic effect(s). Each drug may be used one, more than once, or not at all:

a. Vincristine
b. Bleomycin
c. Prednisone
d. Adriamycin
e. Cytoxan

A-36. ______Cardiac toxicity

A-37. ______Pulmonary fibrosis

A-38. ______Constipation

A-39. ______Neurotoxicity

A-40. ______Hemorrhagic cystitis

A-41. Which of the following statements is/are true concerning immunotherapy?

1. Vaccination/Scarification with Bacillus/Calmette/Gverin (BCG) vaccine is an example of a non-specific type of immunotherapy.
2. Specific immunity is available for only one type of cancer melanoma.

a. 1 only is true
b. 2 only is true
c. 1 and 2 are true
d. 1 and 2 are false

A-42. Transfer of antitumor antibodies or sensitized lymphocyte from a donor is likely to provide:

a. active immunity
b. passive immunity
c. host resistive immunity

A-43. The initial therapy in the treatment protocol for melanoma is:

a. wide local excision
b. isolation - perfusion
c. chemotherapy
d. immunotherapy
e. radiation therapy

A-44. Situation E: Mr. Johns has been told the prior day that he is to have a resection of his stomach due to a malignant neoplasm. In assessing his needs, the nurse identifies that he and his wife seem frightened at the news he has cancer.

An approach the nurse may use to assist in meeting this need would be:

a. Explain that there is always a chance of error in diagnosis.
b. Encourage him to discuss his fears and anxieties if he desires.
c. Tell him not to worry, because he has very good doctors.
d. Explain that modern treatment methods are likely to provide a cure.

Situation F: (Questions 45 - 46)

A 22 year old male comes to the clinic with the complaint of sudden onset of night sweats, frequent fever, unexplained weight loss, and increasing fatigue. Physical exam reveals:

- several painless 0.5 cm nodes in the right posterior cervical area.
- chest x-ray indicates mediastinal adenopathy.
- CBC and urine test are normal.
- remainder of physical is normal.

A-45. The clinical picture strongly indicates:

a. multiple myeloma
b. Hodgkin's disease
c. tuberculosis
d. mycosis fungoides

A-46. The most important diagnostic process prior to starting therapy for this client is:

a. to demonstrate the presence of abnormal proteins in a serum specimen.
b. to do a bone marrow biopsy using frozen section technique.
c. to classify the disease via anatomical staging.
d. to perform a total body lymphangiogram.

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Situation G: (Questions 47 - 48)

Jane, 6 years old, has leukemia. On examination, retinal hemorrhages and petechiae on both legs were noted. The nursing care plan includes temperature every four hours.

A-47. Jane symptoms are probably the result of:

a. Decreased fibrinogen concentration
b. Inadequate blood calcium
c. Faulty prothrombin production
d. Insufficient number of platelets

A-48. If Jane develops a fever it is likely due to:

a. Anoxic tissues are excessively vulnerable to bacterial ingress.
b. Enlarged lymph nodes release sequestered pathogens into the blood.
c. Immature leukocytes are unable to phagocytose bacteria normally.
d. Hypersensitivity reactions make her a poor candidate for antibiotic therapy.

Situation H: (Questions 49 - 68)

Virginia Kaplan is a 48 year old educational psychologist, married, mother of two children, ages 11 and 13. During self breast examination, she discovered, a hard palpable mass and noticeable redness in her left breast. A physical exam and needle biopsy confirmed the diagnosis of inflammatory breast carcinoma with left axillary nodal involvement. An estrogen receptor test was positive. Tumor board recommended initial radiation therapy, followed by surgery and chemotherapy. She received 2 weeks of radiation therapy.

A-49. Which of the following is/are true concerning Virginia's case?

1. Her case is atypical because cancer of the breast is usually first detected by mammography.
2. Her childbearing statistic is quite common for this pathology.

a. 1 is true
b. 2 is true
c. both 1 and 2 are true
d. both 1 and 2 are false

A-50. At the time the needle biopsy was done which body systems should have been studied for metastasis?

a. Lungs, liver, bones, and heart.
b. Liver, stomach, kidneys.
c. Bones, liver, brain, lungs.
d. Liver, kidneys, brain, bones.

A-51. A positive estrogen receptor assay indicates that Virginia:

a. Will soon experience menopause.
b. Has a greater chance of responding to hormonal manipulation.
c. Has no chance of responding to hormonal manipulation.
d. Will not respond to chemotherapy.

A-52. Radiation therapy is the initial treatment for Virginia because:

a. Statistics indicate a decreased incidence of metastatic disease when local radiation is used.
b. Inflammatory breast cancer is primarily a disease of local extent.
c. Chemotherapy causes more extensive myelosuppression.
d. Radiation is utilized to reduce the inflammation before surgery is performed.

A-53. Which of the following instructions would be included during teaching to assist Virginia with self care activities during radiation therapy:

1. Avoid physical contact with significant others for the first 24 hours following radiation therapy because of hazardous radiation exposure during that time.
2. Avoid friends who have an elevated temperature.
3. Apply talcum powder or over-the-counter salves to relieve dryness or itching.
4. Avoid shaving under her left arm.
5. Apply warm, moist compresses to radiation site if itching or pain occurs.

a. 1, 3, 5
b. 2, 4, 5
c. 1, 3
d. 2, 4

Additional data - Situation H:
Virginia is asked to sign an operative permit for a modified radical mastectomy.

A-54. Which of the following self care activities would you encourage?

1. Ask the doctor if she has a choice of surgical procedures.
2. Select a physician who is skillful in gynecologic surgery.
3. Talk with husband and family about her feelings about the loss of a breast.
4. Discuss the availability of breast prosthesis.

a. 1, 2, 3
b. 1, 3, 4
c. 2, 3, 4
d. 3, 4
e. all of the above

Additional data - Situation H:

Virginia has completed her course of radiation, is 4 weeks post surgery and completed 1 course of chemotherapy 3 weeks ago. Chemotherapy consisted of a combination of cytoxan, 5 - FU and methotrexate. The following lab data were obtained on Virginia's visit to the clinic yesterday prior to beginning her 2nd course of chemotherapy.

Hgb. 11.8 Gm/100 ml (normal 13-15.5)

Hct. 36 Val/100 ml (normal 38-46)

WBC 2400/ ul

Platelets 60,000/ ul

K 3.7 m Eq/l (3.5-5.5)

Ca. 5.9 m Eq/l (4-5)

X-ray reveals density approximately 5 cm, right femur

Her current symptoms are:

- nausea, vomiting
- irritability
- lethargy, fatigue, weakness
- stomatitis
- a sore on her arm that will not heal and has purulent drainage
- bruises on her arms and legs

A-55. Considering the likely etiology of Virginia's nausea and vomiting, the specific treatment to relieve these symptoms should be:

a. altering the dosage of the chemotherapy.
b. giving fluids and possibly administering mithramycin.
c. giving packed cells.
d. administrating Kce to keep serum level to upper normal limits.

A-56. Which of the following statements best explain(s) Virginia's laboratory values:

1. Leukopenia is a common side effect of each of the chemotherapeutic agents being used.
2. Thrombocytopenia is unexpected, does not fit the clinical picture, and should be rechecked.

   a. 1 is true
   b. 2 is true
   c. 1 and 2 are true
   d. 1 and 2 are false

A-57. Which of the following statements best explains Virginia's current symptoms?

a. Stomatitis is a common side effect of 5 FU and Methrotrexate.
b. Nausea, vomiting, fatigue and weakness is an expected and common occurence with the CMF protocol at this point in Virginia's cycle of treatment.
c. Hypercalcemia is an unexpected and unexplained occurence resulting in many of Virginia's symptoms.
d. The low hematocrit is responsible for the bruises, fatigue and weakness.

A-58. In view of Virginia's current lab data and symptoms a revised treatment plan would most likely include all of the following except:

a. The immediate substitution of tamoxifen for chemotherapy.
b. A reduction in the next dose of chemotherapy.
c. A cat scan, liver function studies, blood chemistries, urinalysis, and EKG for further assessment.
d. Tumor board consult to discuss the advisability of oophorectomy and/or adrenalectomy.

A-59. Virginia's treatment protocol is likely to produce:

1. some alopecia
2. constipation
3. dose-related myelosuppression
4. possible cystitis
5. mild to moderate nausea

   a. 2, 4, 5
   b. 1, 3, 5
   c. all of the above
   d. 3, 5
   e. 1, 3, 4, 5

Additional data - Situation H:

Virginia returns to the clinic to begin her third course of chemotherapy. She tells the nurse that nausea remains frequent and she continues to vomit at least once a day. In addition, Virginia states she is increasingly tired and weak. It has been 3 weeks since her last treatment and she is not sure if she wants to continue chemotherapy treatment. Virginia briefly mentions she has slight pain in her right leg and lower back from "too much rest". Objective assessment reveals a weight loss of 8 lbs. since the previous visit, poor skin turgor, dry and pale mucuous membranes, and a slight limp of the right leg. Maintains no eye contact with nurse and has an obviously decreased ability to maintain concentration.

A-60. Important factors for the nurse to consider in her assessment of Virginia's current status would include:

1. nausea and vomiting usually subside within 24 - 72 hrs. after chemotherapy treatment.
2. the peak period of myleosuppression (nadir) for cytoxan, methotrexate, and 5 FU is 7- 14 days.
3. the femur and lower spine are frequent sites for metastasis in breast cancer.

   a. 1, 3
   b. 2, 3
   c. all of the above

A-61. Which of the following would be the priority intervention at this time?

   a. More extensive assessment to evaluate Virginia's current physical and psychological status.
   b. Discuss with Virginia and her physician the need for additional antiemetics to control nausea and vomiting.
   c. Discuss the need for prn pain medication to control her leg and back pain.
   d. Explore with Virginia the alternatives to further chemotherapy.

A-62. Specific suggestions the nurse may give Virginia regarding the management of nausea and vomiting might include:

1. Eating foods high in sodium.
2. Eating 6 small frequent meals instead of 3 large meals per day.
3. Taking a prescribed antiemetic every 4 hrs. on a regular basis.
4. Increasing fluid intake with 7-up, juices, and broth.
5. Indicating acceptance of her use of marijuana if it helps.

a. 1, 3, 5
b. 2, 4, 5
c. 2, 3, 4
d. 1, 3
e. all of the above

A-63. A knowledge of the pathophysiology of pain would be important for the nurse to know in helping Virginia to manage her pain. Which of the following concepts are true?

1. The perception of pain is influenced by physical, psychological, environmental, and cultural factors.
2. Initial pain medication should be instituted on a PRN basis to avoid early drug dependence and tolerance in case she needs larger drug doses later.
3. Management of chronic pain requires different interventions than acute pain.
4. A decrease in pain is an expected outcome from a regular schedule (i.e. every 4 hours around the clock) of pain control and not an indication to reduce the dose.
5. Intramuscular injections are the route of choice if anticipated pain relief regime is over a long period of time.

a. 1, 5
b. 2, 3, 5
c. 1, 3, 4
d. 1, 2, 5
e. all except 4

A-64. Virginia asks the nurse what she can do at home to manage her pain, which nursing interventions would be most appropriate at this time?

1. Explore the meaning the pain has for Virginia.
2. Encourage her to decrease her activities and take more frequent rest periods.
3. Instruct Viriginia to use pain medications only when she needs them, to avoid addiction.
4. Assess Virginia's desire to try relaxation techniques, breathing exercises, visual imagery or apply other self-guided techniques that may have worked for her with previous pain experiences.
5. Instruct Virginia or her family to keep a diary that records when she has pain, what she tries to relieve the pain, if it works, and what, if anything, precipitates the pain.

a. 2, 3, 4
b. 3, 5
c. 1, 3
d. 1, 4, 5
e. all of the above

A-65. The doctor has ordered Methadone 10 mg. by mouth every 6 hours and Elavil 75 mg. by mouth every h.s. Virginia tells the nurse she stopped the Elavil after 2 days because it wasn't working and she was taking too much medicine. In addition, she decided to take her Methadone every 4 hours to try to get better relief. Which of the following information is important for you to teach?

1. At this point in treatment, comfort measures are the primary goal and Virginia may adjust the dose of Methadone until she finds her own comfort level.
2. Methadone is stored in subcutaneous tissue and has a cumulative effect.
3. Elavil requires approximately 10 - 14 days to achieve analgesia and antidepressant effects.
4. Methadone is not recommended for chronic cancer pain due to the respiratory depression and psychological dependence often associated with its usage.
5. A non-narcotic analgesic such as Tylenol 600 mg. every 4 hours may be a useful addition to the pain regime.
6. The increase of the dosage of Methadone would be more effective than adding Elavil or other potentiators.

a. 1, 2, 6
b. 1, 4, 6
c. 2, 3, 5
d. 2, 4, 6

A-66. Virginia tells the nurse that her daughter thinks she needs help at home. "My daughter thinks this pain in my leg, and back, and my shortness of breath are caused by the cancer. I keep telling her the cancer is controlled by the chemotherapy and these problems are due to my lack of activity! It is, however, getting harder to manage at home" Virginia then asks the nurse "Am I going to die?" Which response(s) would be the most appropriate for the nurse at this time?

a. "Virginia, everyone will die at sometime. Do not give up hope."
b. "I hear your concern about what's happening to you. Tell me about the problems you are having".
c. "The doctors are doing everything they can to help you."
d. "The chemotherapy is not controlling your cancer. We can control your pain, make your breathing easier, and be available whenever you need us."

A-67. Which of the following are appropriate concepts to guide the nurse as she attempts to assist Virginia cope with her disease progression?

1. degrees of awareness and denial often coexist over a period of time.
2. It may be possible to accept the diagnosis of cancer but later deny the related symptoms and progression of the disease.
3. Anger is an unhealthey coping strategy.
4. People with cancer usually do not want to know the extent of the disease.
5. It is the nurses' responsibility to assist individuals to accept the reality of their death in order that the individual die a peaceful death.

a. 1, 3, 5
b. 4, 5
c. 1, 2
d. 2, 3
e. all of the above

A-68. In anticipation of Virginia's prognosis, the nurse begins to plan for continued and future care as Virginia's health status deteriorates. Virginia has expressed a desire to die at home. What nursing interventions would be appropriate at this time?

1. Encourage Virginia to manage at home without help so long as possible to foster independence.
2. Assist Virginia to assess and mobilize her support systems.
3. Assist Virginia to identify community resources that may be useful to her.
4. Encourage Virginia to return to the hospital where available support systems will be at hand.

a. 1, 2
b. 2, 3
c. 1, 3
d. 4

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Part A: Oncology Nursing Practice Knowledge Test

Item	Correct Response	Content Being Tested
A-1	a	definition associated with epidemiology
A-2	a	reading cancer statistics
A-3	b	reading cancer statistics
A-4	a	interpretation of epidemiology chart
A-5	a	application of data from epidemiology research
A-6	d	cost effectiveness in detection program
A-7	a	application of concept - risk factors in lung cancer
A-8	c	application of fact re: diagnosing lung cancer
A-9	a	factual knowledge re: risk factor and colon cancer
A-10	c	application of concept re: detection methods, rectal cancer, nursing process -implementation
A-11	b	application of facts re: risk factors, breast cancer
A-12	e	concepts - relationship of hormones to reproductive organ cancer
A-13	c	concept - detection of cervical cancer - nursing process - implementation
A-14	b	concept - detection esophageal cancer - nursing process - assessment of data
A-15	c	concept - cancer of the bladder
A-16	b	concept - prevention & pathophysiology of oral & cervical cancer
A-17	b	risk factors for skin cancer
A-18	c	concept - genetics role in development of cancer
A-19	c	impact of trauma, & host resistance predisposing an individual to develop cancer (risk factors)

Item	Correct Response	Content Being Tested
A-20	d	concept - pathophysiology of cancer
A-21	a	concept - pathophysiology of cancer
A-22	a	concept - pathophysiology of cancer
A-23	e	concept - pathophysiology of tumor growth
A-24	d	concept - pathophysiology - grading of tumors
A-25	d	terminology re: tumor
A-26	c	concept - pathophysiology - metastosis & complications of cancer
A-27	d	concept - treatment modality - surgical procedures in cancer therapy
A-28	c	concept - treatment modality: radiation therapy
A-29	d	concept - treatment modality - radiation therapy
A-30	c	concept - principles of radiation therapy
A-31	b	concept - physiology - understanding principles of radiation and chemotherapy
A-32	d	concept - principles of chemotherapy
A-33	b	concept - physiology - understanding principles of chemotherapy
A-34	d	concept - principles of chemotherapy - effects on normal cells
A-35	e	concept - symptom management
A-36	d	concept - side effects of chemotherapy on normal cells
A-37	b	" " " " " "
A-38	a	" " " " " "
A-39	a	" " " " " "
A-40	e	" " " " " "
A-41	a	concept - immunotherapy, specific/non-specific
A-42	b	concept - immunotherapy, active/passive immunity

Item	Correct Response	Content Being Tested
A-43	a	concept - treatment modalities for melanoma
A-44	b	concept - psychosocial/grief process, nursing process: implementation
A-45	b	concept - diagnosis - Hodgkin's disease
A-46	c	concept - diagnostic procedures for Hodgkin's
A-47	d	concept - pathophysiology of leukemia, nursing process: assessment
A-48	c	concept - pathophysiology of leukemia
A-49	b	concept - epidemiology & detection breast cancer nursing process: assessment of clinical data
A-50	c	concept - metastasis of breast cancer, application in given situation
A-51	b	concept - treatment of breast cancer, applicatio in given situation
A-52	d	concept - breast cancer (inflammatory) & course of disease
A-53	d	concept - principles of radiation therapy & effects on normal tissue, nursing process: implementation
A-54	b	concept - of self care with oncology patient, nursing process: Implementation
A-55	b	concept - symptom management nausea & vomiting nursing process: implementation
A-56	a	concept - blood picture alterations in Oncology patient under chemo & radiation therapy. Nursing process - assessment of lab values
A-57	a	concept - integration of knowledge relating to breast cancer, side effects of chemotherapy Nursing process: application of data in given situation
A-58	a	concept - knowledge of breast cancer & chemotherapy treatment, nursing process: application of data & assessment
A-59	e	concept - understanding side effects of chemotherapy
A-60	c	concept - knowledge of breast cancer, metastasis and side effects of chemotherapy

Item	Correct Response	Content Being Tested
A-61	a	concept - understanding etiology of nausea & vomiting, chemotherapy, hypercalcemia, nursing process: assessment
A-62	b	concept - symptom management, nursing process: implementation
A-63	c	concept - principles of chronic pain
A-64	d	concept - symptom management, nursing process: implementation
A-65	c	concept - pain management, nursing process: implementation
A-66	b	concept - coping strategies, nursing process: implementation
A-67	c	concept - coping strategies, nursing process: assessment
A-68	b	concept - supportive terminal care, nursing process: implementation

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POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

PART B: ONCOLOGY NURSING EDUCATION KNOWLEDGE TEST

DIRECTIONS: PLEASE READ CAREFULLY

1. Use answer sheet. Complete all requested information.

2. Choose the best (most complete) answer unless otherwise indicated. One answer per question.

3. Use a number 2 pencil for answers: MAKE YOUR MARKS DARK. Check your cards before handing them in.

4. Erase cleanly.

5. Use a pen or regular pencil to fill in your name and other information ON EACH ANSWER CARD.

6. Check the examination for missing pages. Last page will be marked "THE END".

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Situation A: (Questions 1 - 10)

Ms. Barbara Bell, inservice education director for a large county health department nursing service, has decided to develop a series of programs in oncology nursing for the staff.

B-1. In determining what the staff see as their knowledge and skill deficits in oncology nursing, Ms. Bell would find it helpful to conduct a:

1. Health fair
2. Formative evaluation
3. Needs assessment
4. Survey of clients

B-2. Ms. Bell bases her decisions about course content on the nurses' knowledge and skill deficits; however, the nurses seem reluctant to enroll in the structured courses which she offers. This reluctance may be an indication of the nurses':

1. Need for self-direction
2. Altered role of learning
3. Vast fund of experiences
4. Fear of failure

---

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B-3. Several of the nurses caring for terminally ill cancer patients talk with Ms. Bell about their experiences and concerns regarding the quality of care which they are giving. Ms. Bell realizes that these nurses are exhibiting:

1. A desire to please
2. Expressions of insecurity
3. Experiential readiness
4. Developmental tasks

B-4. In conducting seminars on the care of patients with various types of cancer, Ms. Bell is careful to respond to each participant's comments and/or questions. She is using which of the following principles of learning?

1. Feedback
2. Emotional climate
3. Repetition
4. Short-term memory

B-5. In presenting the needs of the cancer patient, Ms. Bell asks the nurses to identify the commonality among the signs and symptoms of clients with varied types of cancer. She is promoting what type of learning?

1. Problem-solving
2. Imitation learning
3. Concept learning
4. Discrimination
5. Affective learning

B-6. Ms. Bell has noted that the nurses participating in the oncology course are discussing specific client problems and spending more time with client families. She interprets this as evidence of:

1. Problem-solving
2. Imitation learning
3. Concept learning
4. Discrimination
5. Affective learning

B-7. Ms. Bell chooses several measures to evaluate the nurses' learning. Which of the following measures chosen by Ms. Bell can be best described as learner products?

A. Use of reserved reading materials
B. Written essay examination response
C. Class discussion
D. Nursing care plan

1. A, B
2. B, D
3. A, C
4. B, C

B-8. Ms. Bell develops two forms of an end-of-course examination by dividing a large pool of test items into two content-parallel versions. Both forms are administered to all learners on the same day. Ms. Bell is trying to determine test:

1. Validity
2. Standardization
3. Useability
4. Reliability

B-9. Ms. Bell also asks experts on the subject of oncology nursing to rate agreement between the test items and the course objectives. She is using this approach to determine test:

1. Validity
2. Standardization
3. Useability
4. Reliability

B-10. Ms. Bell has developed a psychomotor checklist in which she has attempted to identify the competencies needed by nurses caring for oncology clients. How would this type of checklist be described?

1. Norm-referenced measurement

2. Criterion-referenced measurement

****

Questions 11 - 13 (Curriculum Concepts)

Match examples in Column II with curriculum in Column I. Each example in Column II is to be used only once. There is only one answer for each item.

Column I Concepts	Column II Examples
B-11._____Teaching strategy	a. Individual, family, community
B-12._____Sequence of content	b. Simulation, role-playing, games
B-13._____Target system	c. Simple to complex, chronological
	d. Diagnosis and treatment modalities
	e. Inductive and deductive reasoning

B-14. According to value's clarification theory the sequential steps used to clarify one's values are:

1. Moralizing
2. Acting
3. Modeling
4. Choosing
5. Prizing

a. 1, 2, 3
b. 3, 1, 4
c. 1, 5, 2
d. 2, 3, 4
e. 4, 5, 2

B-15. The philosophy of an educational program in nursing is likely to include statements concerning:

1. The nature of nursing
2. Definition of health
3. The role of the educational offering
4. The organizational structure of the institution

a. 1, 2, 3
b. 2, 3, 4
c. 2, 4
d. all of the above

B-16. After developing the philosophy of an educational program the nurse educator writes the conceptual framework which:

- a. outlines the aims and purposes of the program.
- b. states a selected theory or theories to be used as a rationale for program development.
- c. conceptualizes the characteristics of the learner and the environment in which learning will occur.
- d. describes the scientifically tested theories which will be used to reality test the learning experience.

B-17. Place in sequence the following list of behaviors necessary in the curriculum - building process:

1. select appropriate learning activities.
2. determine desired outcome behaviors.
3. design tool to evaluate the achievement of outcome behavior.
4. identify program goals.

- a. 2, 4, 1, 3
- b. 2, 1, 4, 3
- c. 4, 2, 1, 3
- d. 4, 1, 2, 3

B-18. Place in sequence the following list of activities necessary in designing the pattern of courses to be used in a curriculum:

1. Devise alternative organization and course patterns.
2. Devise each individual course in detail.
3. Formulate the aims, purposes and/or objectives.
4. Select a curriculum pattern.

- a. 1, 3, 4, 2
- b. 3, 4, 1, 2
- c. 3, 1, 4, 2
- d. 4, 3, 1, 2

B-19. One of the objectives in a nursing practicum is "to safely administer an intramuscular injection". Appropriate teaching strategies to achieve this specific objective would include:

1. a seminar on injection sites.
2. contrasting and comparing intramuscular, intravenous and subcutaneous sites.
3. audiovisual demonstration of an intramuscular injection.
4. observe nurses in a pediatric immunization clinic giving P.P.D. (tuberculin) testing.

a. 1, 2, 3
b. 1, 3, 4
c. 3, 4
d. 1, 3,
e. 3 only

B-20. Process evaluation is essential throughout the curriculum planning process in order to:

1. Permit redirection before plans become too fixed.
2. Determine attainment of goals and objectives.
3. Provide a check on the adequacy of the plans.

a. 1, 2
b. 1, 3
c. 1 only
d. all of the above

Questions 21 - 24 (Evaluation Terms)

Match the evaluation terms in Column II with the characteristics of evaluation in Column I. (Items from Column II may be used more than once).

Column I

Characteristics of evaluation

_____B-21. Performance is evaluated relative to that of others

_____B-22. Is used to predict success

_____B-23. Every learner has potential for receiving high scores

_____B-24. Allows the learner to compete with himself and cooperate with other learners

Column II

Terms

a. Norm-referenced evaluation

b. Criterion-referenced evaluation

****

B-25. If you are attempting to determine whether or not a program is fulfilling its goals, you are assessing the ____________ of the program:

a. Positive impact
b. Effectiveness
c. Cost
d. Efficiency

****

Situation B: (Questions 26 - 29)

You have completed a year long post-master's fellowship program in oncology nursing education and have returned to your previous position co-teaching a 5-unit course, Nursing 100, with a colleague who is primarily interested in critical care nursing. You would like to begin to implement some of the knowledge you learned from your post-master's program. One of the current course objectives is "to identify problems common to individuals and their families whose lives are disrupted by long-term health needs".

B-26. Before beginning any plans for revision of Nursing 100 you should first:

a. talk with the Department Chairperson about what you learned in your program.
b. review the philosophy of the department of nursing for beliefs about health.
c. check the course objectives for the focus and content to be taught in Nursing 100.
d. discuss with your colleague the need to have half of the course focus on critical care and half on chronic illness.

B-27. The stated objective test which of the following learning domains?

a. psychomotor
b. cognitive
c. affective

B-28. The stated course objective as stated:

1. Describes the behavior expected and the content to which that behavior applies.
2. Reflects the teaching strategy to be used to measure achievement.
3. Is sufficiently specific to be used as a grading criterion.

a. all the above are true.
b. 1, 2
c. 2, 3
d. 1 only
e. all are false

B-29. Recognizing there is a correlation between resistance to change and basic individual human needs, which of your colleague's needs is most likely to be threatened as you propose changes:

a. Ego
b. Security
c. Love and respect
d. Self-actualization

****

Situation C: (Questions 30 - 36)

As an oncology nurse educator you are interested in setting up a continuing education course for staff nurses on nutritional needs related to the pathophysiology of cancer and treatment side effects. You would like to give this 12 hour course in the summer for continuing education credit over a 4 week period.

B-30. In developing this course what is your first step?

a. develop a conceptual model based on needs of cancer patients.
b. arrange the schedule of classes with the C.E. Department.
c. send out a short questionaire to determine the learning needs of the nurses working at the local hospital and clinics.
d. formulate the aims, purposes and/or objectives for your course.

B-31. Which of the following statements are likely to be true about the learners in your class?

1. The nurses will be self-directed because of increasing maturity.
2. The nurses will bring critical experiences to the learning sessions that will affect the outcome.
3. In the adult nurse, readiness to learn is considered to be the result of biological growth.
4. The nurses will have a subject-oriented approach to the nutritional needs.

a. 1, 4
b. 1, 2
c. 2, 3
d. 2, 4

B-32. You have been given approval to teach the course and have decided to use Orem's theory of nursing for your framework. Which of the following best describes the goal of nursing as it will be used in this course?

a. The nurse helps the client adapt to changing stimuli in the surrounding environment.
b. The nurse intervenes to support stability of behavior in the subsystems of man.
c. The nurse supports the self-care process in assisting individuals to participate in their own care according to their ability.
d. The nurse assists the client in maintaining optimal health by seeking self-actualization in finding meaning in the illness.

B-33. The utilization of nursing theory in curriculum development will assist you to:

1. Identify significant nursing problems and provide a framework for problem-solving.
2. View nursing in a holistic and dynamic manner.
3. Determine the goals of implementation.
4. Clarify the belief system of the potential learner.

   a. all of the above
   b. 1, 2, 3
   c. 2, 3, 4
   d. 1, 3, 4
   e. 2, 4

B-34. You begin writing behavioral objectives for the course. This activity should help you to:

1. Identify the content to be taught in your course.
2. Assess the motivation of your potential learners.
3. Clarify the expected outcome of the learners.
4. Analyze the readiness of the potential learner.

   a. 2 only
   b. 1, 3
   c. 2, 4
   d. 3, 4
   e. all of the above

B-35. What types of knowledge are appropriate for you to include in your content outline?

1. Facts about dosage ranges used in chemotherapy.
2. Principles of communication related to interviewing clients about their eating habits.
3. The concept of hydration related to chemotherapy.
4. Nursing protocols for managing nausea and vomiting.

   a. 2, 3, 4
   b. 1, 3, 4
   c. 2, 4
   d. all of the above

B-36. You decide a course requirement will be to write a nutrition assessment on a 45 year old male with Hodgkin's disease. Appropriate evaluation criteria for this activity would be that the assessment includes:

1. A summary of research findings.
2. Documentation of client changes in dietary patterns.
3. Data concerning clients change in weight and muscle mass.
4. Suggested approaches for meeting his nutritional needs.

a. 1, 2, 4
b. 1, 3, 4
c. 2, 3
d. 2 only
e. all of the above

****

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Part B: Oncology Nursing Education Knowledge Test

Item	Correct Response	Content Being Tested
B-1	3	concept: steps in program development
B-2	4	concept: characteristics of adult learner
B-3	3	concept: learning readiness
B-4	1	concept: feedback, principle of learning
B-5	3	concept: types of learning
B-6	5	concept: types of learning
B-7	2	concept: evaluating learning outcomes
B-8	4	concept: test realiability
B-9	1	Concept: test validity
B-10	2	concept: norm/criterion referenced measurement
B-11	b	examples of curriculum concepts
B-12	c	" " " "
B-13	a	" " " "
B-14	e	Fact - steps in values clarification
B-15	a	concept: components of a philosophy
B-16	b	concept: description of conceptual framework
B-17	c	concept: of curriculum - building
B-18	c	concept: curriculum building
B-19	d	concept: teaching strategies appropriate to content
B-20	d	concept: process evaluation in curriculum planning
B-21	a	concept: characteristics of norm-referenced, criterion - referenced evaluation
B-22	a	" " " " " " "
B-23	b	" " " " " " "
B-24	b	" " " " " " "

Item	Correct Response	Content Being Tested
B-25	b	concept: program evaluation
B-26	c	application of concept - content selection & organization within curriculum design
B-27	b	application of concept - learning domains
B-28	d	application of concept - learning objectives
B-29	b	application of concept - relationship of change to individual needs
B-30	c	application of concept - needs assessment as first step in course development
B-31	b	application of concept - characteristics of adult learner
B-32	c	application of concept - theorretical framework Orem's theory of nursing
B-33	b	concept: use of nursing theory in curriculum development
B-34	b	concept: writing objectives
B-35	a	application of concept - content appropriate to teaching nutritional needs
B-36	c	application of concept - selecting appropriate evaluation criteria

*

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

PART C: CONSULTANT, RESEARCHER, ADMINISTRATOR, CHANGE AGENT ROLES KNOWLEDGE TEST

DIRECTIONS: PLEASE READ CAREFULLY

1. Use answer sheet. Complete all requested information.
2. Choose the best (most complete) answer unless otherwise indicated. One answer per question.
3. Use a number 2 pencil for answers: MAKE YOUR MARKS DARK. Check your cards before handing them in.
4. Erase cleanly.
5. Use a pen or regular pencil to fill in your name and other information ON EACH ANSWER CARD.
6. Check the examination for missing pages. Last page will be marked "THE END".

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Consultant (Questions 1 - 5)

C-1. The process of consultation includes which of the following phases?

1. Definition and clarification of the consultant role after entering the process.
2. Diagnosis or assessment of the situation by investigation and data collection to determine the problem.
3. Intervention in the roles of catalyst, advocate, expert, change agent, and stimulator.
4. Closure when the consultant verifies the consultee's ability to perform independently.

a. 1, 2, 4
b. 1, 2
c. 2, 3
d. all of the above

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C-2. Important characteristics in the consultant role include:

1. Freedom to formulate problems, establish goals, and delegate tasks and responsibilities to consultees.
2. A position of authority that provides the consultant with the right to make the final decision.
3. In depth knowledge and/or skills in a specialized area.
4. A command of interpersonal communication skills.

   a. 1, 3, 4
   b. 1, 2, 4
   c. 1, 2
   d. 3, 4
   e. all of the above

C-3. The effective utilization of a consultant is dependent upon which of the following conditions:

1. Focus on a problem identified by the consultant in a needs assessment.
2. The consultee's perceived need for assistance.
3. Communications from administration supporting the use of experts in solving organizational problems.
4. Understanding of the role, process, and steps of consultation by organization members.

   a. 1, 2, 4
   b. 2, 3, 4
   c. 1, 2, 3
   d. 2, 4
   e. all of the above

C-4. Which of the following should be included in a contract between consultant and consultee?

1. description of the consultant's role.
2. expected outcomes or products, i.e. reports.
3. an open-ended time frame.
4. the cost for hourly or per diem pay rate for the consultant.

   a. 1, 2
   b. 1, 3
   c. 1, 2, 4
   d. 2, 3, 4
   e. all of the above

C-5. Which of the following behaviors best describes a process consultant?

1. provides specific solutions to consultee's stated problems.
2. collaborates with consultee to explore alternative problem solutions.
3. helps perform a needs assessment.
4. enters contractual agreement for a specific purpose.

a. 1, 2, 3
b. 2, 3, 4
c. 2, 4
d. 1, 3
e. all of the above

****

Situation A: (Questions 6 - 8)

You have contracted to be a process consultant to a group of staff nurses who are concerned about staffing problems.

C-6. Which of the following values systems would need to be clarified during discussion?

1. Task orientation versus human concerns.
2. Content of the work structure of the organization versus the process by which work is done.
3. The quantity versus the quality of life for patients on the unit.
4. Short-term output vs. long-term effectiveness.

a. 1, 2, 3
b. 1, 2, 4
c. 1, 4
d. 2, 4
e. all of the above

C-7. In working with the staff nurses over a period of months, the consultant notes the following occurrences:

. reduced involvement of client with consultant is a mutually agreed upon decision.

. level of involvement decreases in intensity and frequency.

. the consultant is available for further interaction upon client request.

The process which is occurring is called:

a. Decision-making
b. Evaluation
c. Disengagement
d. Problem-solving

C-8. The group with which you are consulting asks "How can we better achieve our client care goals?" The most appropriate intervention by you would be:

a. Agenda-setting
b. Feedback of observations or other data
c. Coaching or counseling of individuals or groups
d. Structural suggestions

****

Researcher

Situation B: (Questions 9 - 15)

You are a nurse educator helping staff nurses on an oncology unit identify frequently occurring phenomena or problems. The staff has elected to study control of pain.

C-9. In helping the staff to formulate a clear problem which of the following should be included in the statement:

1. the topic of interest or need
2. the population to be studied
3. the significance of the problem
4. the major variables
5. the research methodology

a. 2, 4
b. 1, 2, 3, 4
c. 2, 4, 5
d. 1, 2, 3, 5
e. all of the above

C-10. The problem statement of the proposed study will guide the staff during:

1. Selection of a method
2. Collection of data
3. Interpretation of findings

a. 1
b. 2
c. 1, 3
d. 2, 3
e. all of the above

C-11. In developing a conceptual framework for the problem of pain, the nurses would be advised to include some or all of the following information:

1. a documented statement on the physiology of pain.
2. description of cultural reactions to pain.
3. identification of the theory or theories of pain that are being used to interpret the problem.
4. the implications of conclusions drawn from own data collection.

a. 3 only
b. 1, 3, 4
c. 2, 4
d. 1, 2, 3

C-12. In writing a hypothesis on pain control which of the following would you include:

a. prediction or explanation of the relationship between two or more variables such as age and coping processes.
b. problem statements related to the relief of pain.
c. assumptions about the onset, cause and effect of pain.
d. statistical explanation of how people react to pain.

C-13. In selecting the research methodology to study the problem of pain, which of the following approaches would you choose?

a. First select your research method then write your research question around the method.
b. Do a pilot study with the research method you select.
c. Develop the research question then select a method that fits the question.
d. Use an experimental method design to show significance of your data, because it will be the most valid.

C-14. In measuring the validity of the instrument you use to study pain control what is your concern?

a. Is the instrument consistent over time when there is replication of the study?

b. Is the instrument easy to understand?

c. Does the instrument measure what it is intended to measure?

d. Does the instrument allow you to make clinical judgements:

C-15. In determining the reliability of the instrument used to study pain, on what criteria would you base your conclusions?

a. The instrument has been consistent when replicated over a 24 month period.

b. The instrument allows you to measure the variables you determine are the most important.

c. The instrument is understandable to a large group of people.

d. The instrument allows you to manipulate the variables.

****

C-16. The research abstract is designed to:

a. serve as an introduction to the study.

b. critique the research study.

c. provide a synopsis of the entire research.

d. summarize important findings.

C-17. The statement of purpose for a research study is developed primarily to:

1. Identify the reason for the study
2. Identify the scope of the study
3. Justify the need for the research
4. Clarify the significance of the study

a. 1, 2, 3
b. 2, 3, 4
c. 1, 2
d. 1, 4
e. all of the above

C-18. Facts generally accepted as true or correct are known as:

a. Assumptions
b. Limitations
c. Delimitations
d. Statistics
e. Evaluation

C-19. Those restrictions that the nurse researcher places on the study before gathering data are called:

a. Assumptions
b. Limitations
c. Delimitations
d. Statistics
e. Preliminary evaluations

C-20. Which of the following is characteristic of a sample?:

a. The sample must be consistent with the problem to be studied
b. The characteristic to be studied must be represented in the sample
c. The sample must be representative of the total population of the group to be studied
d. All of the above

C-21. The major purpose of a research report is to:

a. Give a precise account of how the hypothesis was proven
b. Communicate what was done in the study
c. Suggest topics for further research
d. Help the author gain national recognition as a scholar

Administrator

C-22. The definition, "one who brings together the effort of many people and focuses them on accomplishment of a desired goal" best describes:

a. a consultant
b. a manager
c. a specialist
d. a teacher

C-23. Leadership is:

- a. A process by which human energy is controlled through mutual stimulation in the pursuit of a common cause or goal
- b. An inborn characteristic that cannot be learned
- c. The use of power of position to effect the goals of a group or organization
- d. A process by which the efforts of individuals are controlled by another individual in order to fulfill his own goals

C-24. Which of the following statements are true concerning decision making?

1. Decision making is making a choice between two or more alternatives.

2. When a problem needs clarifying an effective strategy is to ask the question, "what solutions are necessary"?

3. A highly controlling feature of the decision making process would be instantaneous feedback.

- a. 1, 2
- b. 1, 3
- c. 2, 3
- d. all of the above

C-25. Administration is concerned primarily with which of the following activities?:

1. Securing resources.

2. Selecting and engineering necessary technologies (counseling, group work).

3. Designing organizational structures and processes.

- a. 1, 2
- b. 1, 3
- c. 1 only
- d. all of the above

C-26. The key feature of the bureaucratic approach to administration is:

a. Chain of command
b. Close personal relations
c. A division of labor based on specialization
d. Promotion and selection based on technical competence

C-27. One of the necessary components in successfully using the democratic approach is demonstration of responsible behavior from each individual in the organization. This concept requires the individuals in the organization to:

a. be competitive but collaborate when necessary.
b. always communicate with their superior before going to others to solve problems.
c. practice self control and monitor own behavior.
d. conform to the standard of the organization.

C-28. The structure of a social organization such as a health care agency or university is not visible but can be defined by its components and their operations. Which of the following statements best paraphrases this concept:

a. One can not see a social structure but can describe the structure by identifying the major components or subsystems and the format and informal pattern of relationships among these components.
b. Although a social structure is not a thing such as a body or a car it can be described by the processes used to accomplish it's purpose and goals.
c. The construct of a social organization can be blueprinted by identifying decision making patterns.

C-29. The act of delegation is best described as:

a. Assigning responsibility to another individual or group
b. Assigning authority to an individual or group
c. Assigning the responsibility for performing a task along with the authority needed to perform the task

C-30. As a manager, if you expect a delegated task to be performed effectively, you should:

1. identify the parameters and processes associated with the task.
2. explain the purpose of the task to the recipient.
3. give the recipient a general notion of what you want and ask for a creative product or solution.

a. 1, 2
b. 1, 3
c. all of the above
d. 1 only

C-31. Characteristics of an interpersonal relationship in which one person is capable of satisfying or not satisfying the needs of another person and, as a result, is capable of affecting the other person's behavior is:

a. Power
b. Conflict
c. Authority
d. Influence

C-32. If the group gives you power because the group identifies with you, this is an example of_______________power:

a. Expert
b. Reward
c. Referent
d. Legitimate

C-33. A person is attracted to a group and conforms to its norms because he respects the collective wisdom of the group. Then the group has _______________power:

a. Coercive
b. Legitimate
c. Reward
d. Expert

Situation C: (Questions 34 - 38)

The board of trustees has agreed to have a hospice program and you have been appointed director.

C-34. As you design strategies for developing and implementing the program objectives which of the following are key elements for you to consider?

1. What are the environmental constraints?
2. What human and financial resources are available?
3. What are the current standards of care?
4. How will staff performance be evaluated?
5. What approaches will be essentially risk-free?

a. 1, 2, 3
b. 1, 3, 5
c. 2, 3
d. 1, 2, 3, 4
e. 1, 2, 4, 5

C-35. From a managerial viewpoint the planning phase of this project would involve writing program objectives and determining what needs to be done. The next phase is organizing which includes:

a. Establishing agency purposes and policies
b. Establishing a formal structure of authority
c. Establishing methods for accomplishing agency purposes
d. Establishing favorable working conditions

C-36. As the administrator it is essential for you to set up an evaluation process because it:

1. Provides data to improve a service or program
2. Assists in determining the effectiveness and quality of the services and programs
3. Is a form of social accountability

a. 1, 2
b. 1, 3
c. 2, 3
d. all of the above

C-37. The staff nurses you hire have a positive attitude toward caring for persons with terminal illness. The nurses are likely to be motivated to continue on staff if:

1. some of their personal needs are met
2. you remain neutral and neither praise or reward
3. the number and character of their functions are achievable

   a. 1, 2
   b. 2, 3
   c. 1, 3
   d. all of the above

C-38. Which of the following documents would be most helpful to a new staff member you hire as a reference to "why things are done the way they are:"

   a. purpose of the agency
   b. philosophy of the agency
   c. objectives of the agency
   d. goals of the agency

****

Facilitator of Change

C-39. Planned change is characterized by being:

1. a means of actuating theory into practice
2. a programming of an individual by the facilitator of change
3. a manipulation of variables within a system

   a. 1, 2
   b. 1, 3
   c. 2, 3
   d. 3 only
   e. all of the above

C-40. Strategies for deliberately effecting change in human systems include:

1. scientific investigation and research
2. psychotherapy
3. counseling
4. strikes

   a. 1, 2, 3
   b. 2, 3, 4
   c. 1, 3
   d. all of the above

C-41. In implementing change, which of the following should be considered as important by the change agent in facilitating the change process:

1. Changing individual values to achieve group morality
2. Accepting individual differences and expectations
3. Helping the group construct common interests out of conflicting interests
4. Judging contributions by relevance to problem confronted, not by person's position

a. 1, 2
b. 1, 3, 4
c. 2, 3, 4
d. 1, 2, 3, 4

C-42. The role of the nurse as a change facilitator includes all of the following except:

a. Creating change
b. Helping the client-system toward goals
c. Utilizing the problem-solving process
d. Facilitating awareness for the need to change

C-43. Which of the following statements are/is true concerning resistance to change?

1. A staff nurse who is given an explanation by her supervisor of the reason for her change in assignment to a new floor is not likely to be resistant to the change.
2. If the staff nurse is told by her supervisor that she is the only one qualified to leave her present situation to go to another floor she is likely to be resistant to the new assignment.

a. 1 is true
b. 2 is true
c. both are true
d. both are false

Situation D: (Questions 44 - 47)

The clinical coordinator and supervisor decide that team nursing is not meeting the needs of the patients and nurses on an oncology unit. They decide to change the approach to care by implementing primary nursing.

C-44. Strategies which would effectively produce the proposed change from team nursing to primary nursing include:

1. Explain how the nurse and clients will gain by the change.
2. Help the nurses develop a positive attitude and philosophy of care toward primary nursing as well as the intellectual knowledge.
3. Convince the nurses that any new innovation would be better than team nursing which leads to fragmentation of care.
4. Explain that to initiate a new mode of care such as primary nursing, the nursing and hospital administration will have to support the implementation.

a. 3, 4
b. 2, 3, 4
c. 1 only
d. 1, 2, 4

C-45. Which of the factors is likely to have the greatest effect on the staff nurses ability to adapt to the proposed change?

a. nature of the change
b. rate of change
c. direction of change

C-46. A staff nurse is likely to be resistant to change when he/she perceives the change as:

1. a threat to his/her job status
2. a threat to her value system
3. primarily beneficial to the employer
4. maintenance of status quo

a. 1, 4
b. 2, 3
c. 1, 2, 4
d. 1, 2, 3
e. all of the above

C-47. Which of the following staff comments during a staff meeting can be interpreted as resistance to change?

1. "Primary nursing is another fad that hasn't been proven any more effective than what we have".
2. "I'm willing to try it but I think we should evaluate what we do".
3. "I don't care what method we use because I'm planning on leaving anyway".

a. 1 only
b. 2 only
c. 3 only
d. 1, 2
e. 1, 3

****

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Part C: Consultant, Researcher, Administrator, Change Agent Roles Knowledge Test

Item	Correct Response	Content Being Tested
C-1	c	concept: consultation process
C-2	d	concept: consultant role
C-3	b	concept: consultation process
C-4	c	fact - contract for consultation
C-5	c	concept: process consultant responsibilitie
C-6	b	application of concept - process consultatio identification of values within organization
C-7	c	application of concept - consultation process, disengagement
C-8	c	application of concept - consultation process, problem-solving
C-9	b	concept: problem statement, characheristics
C-10	e	concept: problem statement, purpose
C-11	d	application of concept - conceptual framewor
C-12	a	application of concept - hypothesis, components of
C-13	c	concept: selection of research methodology
C-14	c	concept: validity
C-15	a	concept: reliability
C-16	c	concept: research abstract, purpose
C-17	c	concept: statement of purpose
C-18	a	fact - definition of assumption
C-19	c	fact - limitations, definition
C-20	d	concept: characteristics of sample
C-21	b	concept: research report
C-22	b	concept: manager
C-23	a	concept: leadership

Item	Correct Response	Content Being Tested
C-24	b	concept: decision making
C-25	d	concept: administration
C-26	a	fact - bureaucratic approach
C-27	c	application of concept - democratic approach
C-28	a	concept: social structure
C-29	c	concept: delegation
C-30	a	application of concept - delegation
C-31	a	concept: power
C-32	c	concept: referent power
C-33	d	application of concept - power of group
C-34	d	application of concepts - use of management strategies, controlling results
C-35	b	concept: organizing
C-36	d	application of concept - evaluation process
C-37	c	application of concept - motivation
C-38	b	concept: philosophy of an agency
C-39	b	fact - planned change
C-40	d	concept: strategies for change
C-41	c	application of concept - facilitating change process
C-42	a	concept: role facilitator
C-43	a	application of concept - resistance to change
C-44	d	application of change concepts
C-45	b	" " " "
C-46	d	" " " "
C-47	e	" " " "

SAN JOSE STATE UNIVERSITY
Department of Nursing

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION *

ATTITUDE QUESTIONNAIRE

As you know, the Post Master's Fellowship program in Oncology Nursing Education in which you are enrolled is funded under a contract with the National Cancer Institute. As part of this contract, your faculty, along with evaluation consultants to the program, have developed several questionnaires to assist in evaluating the program. The data and information obtained from these questionnaires will be used only for program evaluation and research. They will in no way affect your grades or progress in the program.

This particular instrument is an attitude questionnaire. It contains statements about such areas as nursing, research, oncology, and education. Each statement is followed by six choices:

- strongly agree
- moderately agree
- slightly agree
- slightly disagree
- moderately disagree
- strongly disagree

Please read each statement and mark the response which indicates the extent to which you agree or disagree with the statement. Please indicate your response to each statement and do not omit any. Don't spend too much time on any one statement. Usually your first reaction to the statement is the one which most likely reflects the way you feel and you should indicate that response.

Thank you.

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ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
1. When the nurse agrees with the client's reluctance to comply with the physician's recommendation for radical surgery, he or she should encourage the patient to express the concern to the physician.						
2. Clients should be allowed to deny or accept as little or as much of the information about the disease as they need to.						
3. Every person should have a complete physical checkup annually.						
4. A cancer client will not do well unless he has hope of recovery from illness in this life.						
5. If a client becomes angry, the best thing to do is to leave him or her alone.						
6. Time and effort should be directed toward developing oncology nurse practitioner programs rather than developing oncology master's programs.						
7. The role of the nurse as the patient's advocate extends to matters of economics, housing, and family relations, as well as medical and nursing care.						
8. Clients with cancer should be informed of their diagnosis.						
9. Dealing directly with a client's feelings about death is to be avoided.						
10. Teaching strategies are very different in professional education than in teaching self-care to clients.						
11. Considering the costs, problems with bureaucracy, and general cost-effectiveness, most of the time it just takes too much effort to bring about change.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
12. In order to get the work done, an authoritarian leadership style is best.						
13. The consultees should unilaterally set the agenda for the consultation.						
14. If the physician does not want the client to know the diagnosis and the client confronts the nurse, the nurse should avoid answering the question.						
15. The term cancer should not be associated with death or disfigurement.						
16. When the terminal cancer patient insists, over the family's objections, on spending a holiday at home, the nurse should side with the patient against the family.						
17. The only object of nursing care for a client with metastatic cancer is to prolong life.						
18. Considering the technical aspect of oncology nursing, affective learning is much less important than is cognitive learning.						
19. It is better not to use the word CANCER when answering questions from cancer clients about their condition.						
20. Hiding the truth from cancer clients magnifies their fears.						
21. A loyal staff member should fully support the boss's views and follow orders because the boss is "always right".						
22. Clients with cancer are more demanding on nursing staff than are other clients.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
23. There is hope for every person with cancer.						
24. One should identify specific concerns before contacting a consultant.						
25. Caring for a client with cancer is anxiety-producing.						
26. Cancer clients may consider themselves fortunate to have time to prepare for death rather than to face it suddenly.						
27. In order to bring about change, it's all right to compromise and settle for less than you really think is needed.						
28. Only those with advanced degrees should be considered qualified to help with research activities like gathering data.						
29. If cognitive learning occurs, affective learning will follow.						
30. People with advanced cancer are so ill and depressed that they have no interest in normal activities.						
31. The most rewarding thing about giving nursing care to cancer clients is being able to contribute to their comfort.						
32. Since clients with disseminated cancer have a sense of loss of the future, it is not practical to use rehabilitation techniques with them.						
33. It is more important to use a teaching strategy shown in the literature to be highly successful than to use one with which the instructor is comfortable.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
34. By detachment from the things of this world, a person can have a more real and effective relationship with others and thus be readier for death.						
35. A debilitated, slowly dying cancer patient has lost his or her function in society.						
36. The consultees should gather information about the problem area and about resources available to resolve the problem, before the consultant arrives.						
37. The most effective teaching strategy is to use a variety of approaches.						
38. Management by committee is ineffective because there generally is a lack of leadership and no one person can be held responsible.						
39. A main focus of oncology treatment should be rehabilitation of the client, in spite of its cost.						
40. No one who anticipates an imminent death can remain in a state of well-being.						
41. Clients with cancers of low five-year survivals (e.g. esphagus, lung, stomach and pancreas) should not be offered aggressive treatment.						
42. Teaching cancer clients about their disease and treatment is as rewarding as teaching diabetics about their illness.						
43. Students should be judged against a standard rather than against each other.						
44. Proctoscopic examinations should be required in routine physical examinations despite their difficulty for the doctor and discomfort for the patient.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
45. A really effective person in bringing about change must have a strong, dominant, aggressive personality.						
46. Lecture is the best method for transmitting information.						
47. Consultants who give a single proven solution from their own experience are more effective than are those who give alternative recommendations from which the clients may choose.						
48. Self-care is an area clients with terminal cancer relinquish readily.						
49. It is more important for managers to be concerned with results than with staff satisfaction.						
50. The best way to learn complex oncology nursing skills is to perform the activity under the guidance of an experienced oncology nurse.						
51. Consultants should not become involved in the group dynamics of their clients.						
52. Students should be evaluated in terms of the amount of effort they display.						
53. Because of the technical nature of cancer treatment, there are few areas of patient care that can be left to the patient and family.						
54. A person can be happily reconciled to a belief in his or her nonexistence after death.						
55. Care of cancer clients is much more time-consuming than is care of other clients.						
56. All clients with cancer suffer pain.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
57. Only those with advanced degrees should have major responsibility for research.						
58. Obtaining routine PAP smears is more the client's responsibility than that of the health care provider.						
59. The primary role of the consultant is to provide a solution to a problem.						
60. The teacher's judgement is an important part of evaluation.						
61. Clients with cancer can enrich the lives of others around them.						
62. Anxiety in cancer clients is relieved when physical pain is relieved.						
63. There is no way to eliminate the emotional aspect of evaluation.						
64. It is important that the consultant and the consultees be as like each other as possible in terms of sex, age, race, educational background and other demographic characteristics.						
65. If a student doesn't learn, it's probably the teacher's fault.						
66. Those clients who are terminal and have not realized it should be told so they can better prepare spiritually for death.						
67. Family members are often too grief-stricken to participate adequately in patient care.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
68. Since it is hard enough to do a good job of caring for a cancer client, it is not wise to risk having to deal with a depressed client by revealing the diagnosis.						
69. Teachers are responsible for facilitating student learning.						
70. Experience shows that cancer clients who say they want to know their condition have adverse reactions to hearing the truth; clients do not really want to know they have cancer.						
71. The only legitimate power is that which is delegated from above.						
72. Being an expert in a particular area qualifies one to be a consultant.						
73. If students are kept guessing about the criterion for success, they will work harder.						
74. Negative feedback inhibits learning.						
75. Clients who have cancer behave in a disagreeable manner.						
76. Only specially trained personnel can give adequate care to cancer clients.						
77. Knowledge of a dreaded prognosis is detrimental to the client and should be avoided.						
78. When allowed to identify their own learning needs, students tend to substitute wants for needs.						
79. You can build a stronger power base through knowledge than through authoritarianism.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
80. If a consultant uncovers a sensitive process issue that is interfering with the solution of the problem for which the consultation was arranged, it is best to ignore the issue and proceed with the problem at hand.						
81. There are strategies which the teacher can use to motivate students to learn.						
82. The harmful reactiions of clients to the news that they have cancer usually overshadows the good of their being told.						
83. If the client will not accept the recommended treatment, the cancer care team is not responsible for the patient's outcome.						
84. In many cancer clients, pain is not adequately controlled.						
85. Caring for a client with cancer is depressing to a nurse.						
86. The effective consultant acts as a pipeline of information between administration and staff, and among staff participating in the consultation.						
87. Nurses who work with cancer clients develop feelings of hopelessness.						
88. Most nurses go out of their way to give extra care and comfort to cancer clients.						
89. It is more difficult to give care to a cancer client who does not know the diagnosis than one who does.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
90. A cancer care team can present a treatment method in such a poor light as to avoid the responsibility of having to undertake major care.						
91. Consultants who give forceful and direct solutions from their own experience are more effective than are those who listen reflectively and allow the consultees to become involved in the development of the solutions.						
92. It is primarily the responsibility of nurse educators to do research for clinical practice.						
93. An experienced teacher is better qualified to identify student learning needs than the students themselves.						
94. Clients with cancer should be encouraged to accept disfiguring surgery in order to be restored to a healthful life.						
95. In patients with prostatic cancer, the results of estrogen therapy are so good that side effects should be disregarded.						
96. Students cannot be objective about their own evaluation.						
97. A process consultant engaged to help expedite the process of setting up a new oncology nursing education program must necessarily be an expert in oncology nursing.						
98. Clients who wish to refrain from pain medication in order to be more lucid should be encouraged, even if the pain is severe.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
99. Clients with cancer should be offered additional or alternative therapy when one method fails.						
100. Consultants in oncology nursing should have at least a master's degree.						
101. The responsibility for identifying student learning needs should be shared equally by student and teacher.						
102. The results of oncology nursing research are generally available and accessible to those who would be interested in the results.						
103. A lack of compliance with a specified learning plan probably means that the learner doesn't want to comply.						
104. Students are ultimately responsible for their own learning.						
105. Aggressive treatment of cancer frequently subjects the patient to illness, pain and expense without much benefit.						
106. The research in oncology nursing is really relevant to the nursing care problems I have to face.						
107. The effective consultant continues to consult outside of scheduled sessions, for example at lunch						
108. Student-identified learning goals tend to be realistic.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
109. It is less emotionally exhausting, and therefore imperative, not to become involved with the client's family in any but the strictest professional sense.						
110. Pity, openly or covertly expressed, by the cancer care team member, can be destructive to the client's well-being.						
111. The scope of oncology nursing research is broad enough to really have impact on patient care.						
112. Student-identified learning needs tend to be trivial.						
113. It is best to decline to care for a cancer client if the nurse has had a recent personal grief experience.						
114. The consultant should not be expected to gather or study information about the consultee agency before coming to the consultation.						
115. Students learn better when they are all treated the same.						
116. The research in oncology nursing is generally well done.						
117. Most nurses avoid contact with terminal cancer patients.						
118. If a given client has a far advance incurable cancer not responsive to surgery, X-ray, or chemotherapy, the cancer care team has no further significant role in the client's treatment.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
119. The use of terminal behavioral objectives is in conflict with continuing self-development.						
120. Upgrading clinical knowledge in oncology nursing should be the responsibility of continuing education in agencies.						
121. Students should be allowed to identify their learning needs without input from teachers.						
122. Living with cancer is better than living with severe disability resulting from its treatment.						
123. One of the responsibilities of the clinical staff nurse is to do research in clinical practice.						
124. Motivation occurs within the student.						
125. Pelvic exenteration is such a mutilating procedure and has such a low cure rate that there is little indication for its use.						
126. Data gathering for physicians constitutes a research acitivity and those doing so should consider themselves involved in research.						
127. Leaders usually reach their level of incompetence.						
128. The use of behavioral objectives causes the learner to substitute extrinsic rewards such as grades for the joy of discovery.						
129. It is the teacher's responsibility to motivate students.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
130. Doctors are so busy working with sick people that they can't be expected to do screening procedures and routine physical examinations on all who walk into their office.						
131. Oncology education should include the content of research in clinical practice.						
132. Inexperienced persons should not question the decisions of an experienced leader.						
133. When behavioral objectives are used, learners seek only attainment of stated behaviors.						
134. Concepts and principles can be better understood after experiencing their actual clinical application.						
135. I feel uncomfortable when a cancer client brings up the topic of cancer, fear of treatment, or death.						
136. It is important that oncology nursing research be based on a multidisciplinary approach, and not just one discipline.						
137. The most difficult aspect of working with cancer clients is the feeling of powerlessness to help them.						
138. Concepts and principles should be taught prior to clinical application.						
139. Good leaders should not be questioned about their decisions.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
140. Learning should always move from general to specific.						
141. Most cancers can be prevented.						
142. The use of power is inappropriate in nursing education.						
143. Behavioral objectives emphasize trivial outcomes.						
144. Nurses' attitudes toward cancer affect their attitudes toward caring for cancer clients.						
145. Learning is enhanced by moving from simple to complex.						
146. Due to the nature of their disease, cancer clients should not be used as research subjects.						
147. Cancer might be contagious.						
148. When the staff have different views of what the problem is, it is better to preserve those differences until the consultant comes, rather than have a meeting to reach agreement before the consultant's visit.						
149. Science and humanities courses should precede nursing courses.						
150. Nursing research is valuable in improving the quality of patient care.						
151. I would not want my family or friends to know that I had cancer.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
152. Leaders should not allow challenges to their authority.						
153. I am open to the suggestions of experts in the field of oncology nursing.						
154. Nurses should not continue to work after they have had a colostomy.						
155. It is all right for new ideas to fail.						
156. Healthy organizations schedule periodic visits with consultants even though problems are not identified in advance.						
157. When there is no designated leader, a leader will emerge.						
158. The state of the art in oncology nursing is such that we should not consider changing accepted practices.						
159. I feel more secure when things at work stay about the same.						
160. Preplanning for the consultant's visit should include a general plan for following up the recommendations.						
161. After caring for a terminal cancer client I feel unclean.						
162. The democratic leadership style is too time consuming.						
163. In the past, I have resisted change.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
164. Clients with cancer emit identifying odors.						
165. The entry into practice of the oncology nursing specialist should be at the master's level.						
166. We need to incorporate new knowledge into oncology nursing programs.						
167. Almost all change is progress.						
168. I am willing to take risks to accomplish important objectives.						
169. We should be educating specialists in the various fields of nursing, i.e. oncology nursing rather than generalists at the baccalaureate level.						
170. The client can be helped and encouraged in any stage of the cancer to do "grief work", that is, to cope with natural feelings of anxiety, fear, and sadness over impending death.						
171. Change and innovation could pave the way to better service to oncology nursing clients in my region of the country.						
172. Behavioral objectives are suitable for use with adult learners.						
173. Innovations should be evaluated and their effectiveness determined before they are accepted and put into wide practice.						
174. The term nurse oncologist should be limited to a person who has passed a nationally recognized certification test.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
175. The main reason for non-compliance among learners is that some learners simply don't know how to comply.						
176. We should return to teaching oncology nursing in the medical model.						
177. There is usually one best way of doing things.						
178. Cancer clients may be less worried about themselves than about others.						
179. A nurse educator should be clinically proficient in all areas of oncology he/she is teaching.						
180. The really important outcomes cannot be stated in measurable terms.						
181. All nursing curricula should include oncology content as opposed to nurses having to learn it on the job.						
182. Baccalaureate programs are deficient in oncology nursing.						
183. Oncology nursing should be taught at all levels.						
184. If we are to stay first in the field, we have to make frequent changes in our policies and programs						
185. Early recognition of cancer has little influence on the prognosis of the disease.						
186. Fear and anguish about the disease are the worst feelings of the cancer client.						

ITEM	Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree
187. An honorable, peaceful, happy acceptance of death is possible for a human being.						
188. There is no need to institute rehabilitation programs for clients with cancer.						

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

Psychomotor Skills Inventory

Please complete the inventory by circling the number of the category which best describes your competency in each activity:

1 = I have done this activity and feel competent
2 = I have done this activity but do not feel competent to do it by myself
3 = I have not done this activity

SKILL	CATEGORY
1. Relaxation techniques for pain, nausea, anxiety	1 2 3
2. Cardio-pulmonary assessment	
a. heart	1 2 3
b. lungs	1 2 3
3. Gastro-intestinal assessment	
a. oral cavity	1 2 3
b. abdomen	1 2 3
c. rectal examination	1 2 3
4. Breast exam	1 2 3
5. Ostomy care	
a. skin care	1 2 3
b. applying bags & appliances	1 2 3
c. elimination regulation methods (irrigation)	1 2 3
6. IV Therapy	
a. venipuncture	1 2 3
b. heparin lock	1 2 3
c. Hickman catheter (intrasil catheter)	1 2 3
7. Parenteral feedings	
a. Nasogastric tube	
1. insertion	1 2 3
2. tube feeding	1 2 3
b. Gastrostomy/jejunostomy tube	
1. feedings	1 2 3
c. Hyperalimentation	
1. dressings	1 2 3
2. feedings	1 2 3
8. Tracheostomy care	
a. dressings	1 2 3
b. suctioning	1 2 3
c. changing tubes	1 2 3
9. Protected environments	
a. strict isolation	1 2 3
b. reverse isolation	1 2 3
10. Wound care	
a. dressing changes	1 2 3
b. sterile technique	1 2 3
c. skin care	1 2 3

Criteria - Relaxation techniques

_____states the uses for relaxation techniques.

_____describes the underlying rationale of relaxation techniques.

_____assessment of client

A. client goals for relaxation
B. areas of stress, pain, vomiting
C. type of technique appropriate
D. medical or psychiatric contraindications

_____guides individual through technique (choose 1)

A. progressive relaxation
B. rhythmic breathing
C. guided imagery

_____evaluation of process

Suggested techniques

_____comfortable position

_____breathing

_____tighten/relax muscle groups

head
face
neck
shoulders
arms
hands
back
buttocks
legs
feet

_____focus eyes on point or close eyes

_____imagine blowing tension away - light taking away, etc.

_____imagine beautiful scene

Criteria - Heart Assessment

_____Describes the general assessment which reflects cardiac functioning (Examples include peripheral pulses, equality of pulses, color, hair distribution, edema, distention of neck veins, degree of respiratory effort, characteristics of skin and nails, temperature of skin, blood pressure, apical pulse, and others)

_____Identifies the significant landmarks which are used in heart auscultation

  _____S_1

  _____S_2

_____States that S_1 is caused by closure of the mitral and tricuspid valves

_____Able to relate S_1 to systole, "lubb" sound, and contraction of ventricles

_____Able to state the relationship between S_1 and the carotid impulse

_____Listen to S_1 at the proper location with the diaphragm of the stethoscope firmly in place

_____States that S_2 is caused by closure of the aortic and pulmonic valves

_____Able to relate S_2 to diastole, "dubb" sound, and ventricular relaxation

_____Listens to S_2 at the proper location with the diaphragm of the stethoscope firmly in place

_____States that S_3 occurs during early diastole as ventricles are filling and is caused by the vibrations of inflow of blood

or

_____States that S_4 occurs during late diastole with late ventricular filling and is caused by atrial contraction

Criteria - Lung Assessment: (Inspection, Palpation, and Percussion)

_____Describes what would be included in inspection to assess lung function (Examples include A-P diameter, muscles used for breathing, position, characteristics of respirations, equality of chest movement during respirations, color, and others)

_____States significant signs of respiratory difficulty (Examples may include nasal flaring, stridor, tracheal tug, cyanosis, grunting, orthopnea, increased respiratory rate, increased pulse rate, and others)

_____Demonstrates how to assess vocal fremitus--uses both hands at same time on corresponding positions on the chest and has patient say "99" while palpating

_____Demonstrates the general pattern used for percussing the chest

    _____Patient positioned accurately for percussing anteriorly, posteriorly, and laterally
    _____Works in a systematic fashion; compares corresponding areas

    _____Uses fingertips only; stationary finger is placed in intercostal spaces parallel to ribs; striking finger hits stationary finger between fingernail and distal joint

    _____Instructs patient to breathe through mouth while percussing

_____While percussing, can state the normal percussion tones which would be heard over major areas of the chest

_____States how the percussion tone would change with increased density and decreased density

Criteria, Lung Assessment (Auscultation)

_____Demonstrates a systematic pattern for auscultating the breath sounds

    _____Starts at either top or bottom of lung field but compares corresponding sides as moves in opposite direction
    _____Uses diaphragm of stethoscope

    _____Auscultates anteriorly, posteriorly, and laterally

    _____Has the patient in appropriate position for area being auscultated

    _____Instructs the patient to breathe through mouth while listening

_____States the name of the breath sound which is normally heard over aerated lung tissue, the bonchi, and the trachea

_____Can draw a diagram representing each of these breath sounds

_____Can name major landmarks of chest which can be used to communicate findings

Criteria - Gastrointestinal: Oral assessment

______Inspection of lips, gums, tongue, teeth and oral mucosa for:

A. general hygiene and condition
B. inflammation
C. Odor
D. lesions, swellings, masses, nodules
E. color

______Bimanual palpation of oral mucosa

______Palpation of tongue

Criteria - Gastrointestinal: abdominal assessment

______identify the divisions of the anterior abdomen,

______visually inspect the abdomen for scars, markings,

______correctly auscultate the abdomen for bowel sounds,

______correctly palpate the abdomen for swelling, pain, masses.

Criteria - Gastrointestinal: rectal examination

_____Collect equipment

_____Explain procedure to client

_____Position client on left side with right hip flexed (male) or lithotomy position (female)

_____Inspect sacrococcygeal, perianal, and anal areas for abnormalities (inflammation, rashes, excoriations)

_____Ask client to strain and insert lubricated index finger into anal canal

_____Ask client to relax as you insert finger into rectum

_____Rotate finger to feel wall surface for lesions, swelling, and fecal content of rectum

_____Examine for position and status of prostate and seminal vesicles (male), cervix and uterus (female)

_____Post examination, clean client, and leave in comfortable position

Criteria - Breast Exam

______Inspects breasts for symmetry with arms at side, raised above head, and with hands on hips

______Inspects for redness, swelling, change in size and shape

______Places small pillow under side being palpated and has patient raise arm above head

______Palpates all areas of each breast in a systematic fashion so that all areas of breasts are covered

______Uses fingers, distal phalanx, with fingers together and flat

______Inspects nipples for discharge, inversion

______Palpates area between breast and axilla and then axilla itself

______States that BSE should be done every month one week after a period or if periods have stopped on a regular day each month

______States the reason for regular breast exams

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Criteria - Ostomy Care: Skin care and Application of Ileostomy or Colostomy Bag

______Chooses proper equipment: cleansing materials, gauze to wick stoma during cleaning, bag, stomadhesive, materials to dry the skin, chux.

______Explains procedure to patient.

______Places chux under patient, and removes filled bag.

______Cleans around stoma, removing all old adhesive, stool, etc.

______Blots stoma during and after cleaning to prevent recontamination of the skin.

______Inspects skin and stoma verbalizing observations of the skin condition.

______Dries skin carefully, and applies 1) toughener, 2) protector, 3) stomadhesive, and presses it down firmly.

______Cuts hole in bag 1/4" larger than stoma.

______Places bag over stoma and stomadhesive (removes gauze wick).

______Checks for fit and leaks.

______Disposes of bag, noting contents (can be done with #3).

______Repositions patient comfortably.

Criteria - Ostomy Care: irrigation

_____Assemble the equipment.

_____Wash your hands.

_____Identify the patient and explain the procedure.

_____Provide privacy, and prepare the patient for the procedure.

a. Assist him to the toilet.
b. Remove his soiled colostomy bag.
c. Prepare the irrigating drain and attach it to the belt.

_____Prepare the solution - 1000 ml water at body temperature.

a. Pour 1000 ml of solution into the irrigator bag.

b. Expel the air from the tubing, then clamp it shut.

_____Lubricate the tip of the catheter.

a. Insert it into the stoma about 3 to 4 inches.

b. Expel the air from the tubing, then clamp it shut.

_____Lubricate the tip of the catheter.

a. Insert it into the stoma about 3 to 4 inches.

b. Unclamp the tubing and allow the solution to run for easier insertion of the catheter.

_____Instill the solution, holding it no higher than the level of the patient's shoulder.

_____After instilling 500 to 1000 ml of solution, remove the catheter.

_____Place an irrigating drain over the stoma.

_____When all the solution and stool have been expelled, remove the irrigating drain.

_____Cleanse and dry the skin.

_____Attach a clean colostomy bag; allow the patient to do this as soon as he is able.

_____Have the patient wash his hands, and provide for his comfort.

_____Clean and return the equipment to storage.

_____Record the treatment on the patient's chart.

Criteria - IV Therapy: Venipuncture

______Wash your hands.

______Approach, identify, and explain the procedure to the patient.

______Select the site for the venipuncture.

______Apply a touniquet around the extremity.

______Examine the selected vein.

______Cleanse site with defatting agent (alcohol).

______Apply bactericidal agent (betadine).

______Pick up the needle.

______Insert the needle into the vein.

______Attach the I.V. tubing to the needle.

______Release the tourniquet.

______Tape the needle and tubing in place.

______Regulate the solution flow.

______Leave the patient safe and comfortable.

______Record the procedure on the patient's record.

Add setting up bottle & tubing criteria

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Criteria - I.V. Therapy: Heparin Lock

______Wash your hands.

______Prepare the medication and draw it up in a syringe.

______Prepare a syringe containing a heparin and saline solution.

______Approach and identify the patient. Explain the procedure.

______Disinfect the injection site.

______Inject the medication into the heparin lock.

______Fill the device by injecting 1 ml. of heparin and saline solution.

______Dispose of the used syringes.

______Record the medication given.

Criteria - I.V. Therapy: Care of Hickman Catheter

_______Wash hands thoroughly.

_______Set up supplies.

_______Remove the old dressings.

_______Thoroughly clean the exite site and catheter with Hydrogen Peroxide, using sterile cotton applicators and sterile 2 x 2 gauze.

_______Apply Betadine ointment to the exit site with a sterile cotton applicator.

_______Place one sterile 2 x 2 gauze under the catheter at the exit site and one over the catheter. Secure dressing with paper tape.

_______Place the capped catheter in a loop onto the chest. Secure with tape.

Criteria - Insertion of Nasogastric Tube

_____Prepare the required equipment

_____Approach and identify the patient, and explain the procedure.

_____Wash your hands.

_____Position the patient.

_____Measure the distance the tube is to be inserted.

_____Lubricate the tube and insert it nasally.

_____Advance the tube into the stomach as the patient swallows.

_____Verify placement of the tube in the stomach by one of these methods:

a. aspirate some gastric secretions.
b. check for the absence of bubbles from the end of the tube placed in water.
c. listen for the sound of air when injected through the tube into the stomach.
d. ask the patient to hum or talk.

_____Tape the tube to the patient's face.

_____Attach the tube to suction, and turn the machine on, or insert plug if not to be attached to suction.

_____Provide for the patient's comfort.

_____Report and record.

Criteria - Tube feedings via nasogastric tube

______Wash your hands and prepare the equipment.

______Approach and identify the patient, explain what you are going to do, and enlist his cooperation.

______Position the patient.

______Check to make sure that the tube is in the stomach.

______Pour formula into the Asepto syringe or funnel. Feedings should be at room temperature (100° - 105° F).

______Regulate flow by raising or lowering the syringe.

______Maintain the level of formula slightly above the neck of the syringe.

______Follow the formula with 1 to 2 ounces of water to rinse the tube.

______Close off the tube and secure it.

______Make the patient comfortable.

______Take care of the used equipment.

______Record on the patient's chart.

Criteria - hyperalimentation: feeding

_______Use a constant-infusion pump.

_______Reset the rate to that prescribed by the physician as necessary, but do not slow or increase the drip to make up for an excess or deficit without consulting the physician.

_______Check the infusion rate every ½ - 1 hour to make certain that the solution is infused continuously and at a constant rate.

_______Change the bottle, tubing, and filter at least once each day.

_______Remove the tape which secures the filter to the dressing.

_______Attach a new infusion set to the new bottle.

_______Prime tubing and tap the end gently.

_______Connect the infusion set to the new filter housing carefully.

_______Hang the new bottle on the pole.

_______Remove the protective covering from the distal end of the filter and discard.

_______Hold the filter parallel to the floor and run solution through the entire line.

_______Gently tap the filter housing to dispel air and tap the end to free glucose droplets. Be careful not to contaminate the end of the filter.

_______Change the IV line at the catheter union rapidly with the patient flat in bed or in low Fowler's position. Use a sterile Kelly clamp to grasp the catheter hub for leverage during the tubing change.

_______Anchor the filter to the dressing.

_______Secure all IV tubing joints with adhesive tape.

_______Readjust flow rate.

_______Write time and date on new tubing.

_______Culture the filter each time it is changed.

Criteria - hyperalimentation: dressing change

_______Change the dressing around the catheter daily, using strict aseptic technique. Face masks should be worn by all persons at the head of the bed.

_______Using alcohol or hydrogen peroxide on a sterile 4 x 4 inch gauze square, scrub a large area surrounding the insertion site.

_______Apply Betadine solution.

_______Apply a prescribed antibacterial ointment directly to the catheter insertion site and 2-3 cm. down the catheter.

______Apply a small dressing around the catheter. Using sterile scissors, cut a slit in the lower piece of a small nonadhering dressing, enabling it to fit around the catheter at the insertion site.

______Apply benzoin to the area where tape will be applied.

______Apply sterile dressings.

______Cover the entire sterile dressing and the union of the catheter and tubing with 5 cm. (2 inch) adhesive tape.

______If the dressing is exposed to moisture such as tracheal secretions or humidified oxygen, protect it with a plastic adhesive.

______Record the dressing change.

Criteria - Tracheostomy Care

______Washes hands prior to beginning procedure.

______Assembles all equipment in an accessible location.

______Removes inner cannula & cleans with sterile water, sterile saline, or H_2O_2 and rinses with sterile water.

______Uses pipe cleaners or brush to clean inner cannula.

______Cleanses incision area with H_2O_2 and normal saline.

______Applies antibacterial ointment to incision area.

______Makes trach dressing from a 4 x 4 gauze pads.

______Places trach dressing correctly around incision site.

______Demonstrates correct technique for changing trach ties.

Criteria - Tracheostomy suction

______Explains procedure to the patient.

______Collects necessary equipment. Sets up sterile field.

______Puts on gloves in a sterile fashion and keeps them sterile during the procedure.

______When appropriate hyperventilate patient with an Ambu-bag before and after suctioning.

______Instills sterile N.S. into trach. to liquefy secretions.
½ - 2 cc: infant/child, 1 - 5 cc: adult

______Lubricates catheter with sterile water or N.S. before insertion.

______Keeps catheter sterile before insertion.

______Places catheter gently and slowly into the orifice, using no suction during the placement.

______Removes catheter with an even rotating motion, using intermittent suctioning and not more than 15 seconds.

______Nurse evaluates respiratory status after suctioning and makes the patient comfortable.

______Verbalizes documentation - color, amount, and consistency of secretions, patient's tolerance and effectiveness of procedure.

Criteria - Strict Isolation

To enter the room:

______Removes rings and watch.

______Puts on cap to cover hair completely and mask to cover both nose and mouth.

______Puts on apparel before entering the isolation room.

______Puts arms into the sleeves of the gown with the opening in back and ties neck tie in a bow.

______Overlaps or rolls gown edges at back so that uniform is completely covered and ties waist ties in a bow

______Washed his/her hands.

To leave the room:

______Washes hands using paper towel to turn off faucets.

______Unties waist strings.

______Washes hands using paper towel to turn off faucets.

______Removes mask; holds by string and discards in appropriate container.

______Removes cap and discards in appropriate container.

______Unties neck strings and removes gown without contaminating clothing or hands.

______Folds or rolls gown so that contaminated surface does not come in contact with any part of the body or clothing and discards in appropriate container.

______Washes hands; turns off faucets with paper towel.

______Leaves room using paper towel to touch door handle and discards paper towel inside room.

Criteria - Reverse Isolation

To enter the room:

_______Removes rings and watch.

_______Puts on cap to cover hair completely and mask to cover both nose and mouth.

_______Puts on shoe covers.

_______Washes his/her hands.

_______Puts on sterile apparel before entering the isolation room.

_______Removes gown from sterile package without contaminating it.

_______Puts arms into the sleeves of the gown with the opening in back and ties neck tie in a bow without contaminating gown.

_______Overlaps or rolls gown edges at back so that uniform is completely covered and ties waist ties in a bow without contaminating gown or recognizes when has done so.

_______Puts on sterile gloves without contaminating (or recognizes when has done so.)

To leave the room:

_______Removes and discards apparel in appropriate containers after leaving room.

Criteria - Care of equipment/specimens in an Isolation Room

Role as Clean person outside isolation room

________Stood at doorway to isolation unit with a plastic bag to receive "dirty" bag.

________Folded plastic bag back over the hands to protect from contact with the dirty bag.

________Observed "dirty bag" being placed in plastic bag to make sure that she and the "clean" bag were not contaminated.

________Tied top of clean bag to secure "dirty" bag within.

________Labeled bag "ISOLATION".

________Labeled bag with contents in it as "trash"-"glass", etc.

________Washed hands.

________Recognized any break in isolation technique.

Preparation of urine specimen for lab

________Places top of container (with inside up) and container with label on a double thickness of paper towels inside the isolation room.

________Pours the specimen without spilling and/or contaminating container.

________Properly places specimen into a bag marked "ISOLATION" held by a clean person at the doorway.

Criteria - Wound Care: Changing a Sterile Dressing and Skin care

________Collect supplies and prepare patient and environment.

________Loosen binder or tape.

________Remove soiled dressing and discard.

________Inspect wound.

________Put on sterile gloves, if appropriate, or use sterile forceps.

________Cleanse around wound with antiseptic.

________Apply ointment or powder, if indicated.

________Apply dressing.

________Discard gloves or forceps.

________Apply dressing retainer.

________Leave patient comfortable and return items to storage.

________Record procedure.

Criteria - Wound Care

Setting up sterile field

_______Washes hands.

_______Opens towel pack on a flat, dry surface.

_______Opens towel pack so that hand does not extend across sterile item while opening.

_______Maintains sterile field while opening dressing tray.

_______Opens pkgs. and drops contents onto sterile field.

_______Drops 4 x 4 near center of sterile field at least 1" from edge of towels.

_______Does not touch contents of pkg. with anything unsterile.

_______Opens instruments and drops onto sterile field using same precautions as with 4 x 4's.

_______Drops instruments near center of sterile field with the same care as with previous materials.

_______Does not touch contents of pkg. with anything that is unsterile

_______Maintains a sterile field.

UNIVERSITY OF ALABAMA SCHOOL OF NURSING
UNIVERSITY OF ALABAMA IN BIRMINGHAM
GRADUATE PROGRAM

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

SKILLS INVENTORY

Please complete the inventory by checking the category that best describes your level of competency in each skill. The categories are defined as follows:

1. Can function independently - have been validated by supervisor and/or colleague according to established standards of practice.

2. Need supervision only - wish to gain additional experience, with a teacher critically observing activity and giving feedback as to compliance with established standards of practice.

3. Need instruction only - wish to gain additional knowledge and/or practice in simulated situation.

4. Need instruction and supervison - see definitions 2 and 3.

UNIVERSITY OF ALABAMA SCHOOL OF NURSING
UNIVERSITY OF ALABAMA IN BIRMINGHAM
GRADUATE PROGRAM

POST-MASTER'S FELLOWSHIP PROGRAM IN ONCOLOGY NURSING EDUCATION

RATIONALE FOR USE OF SELF-ASSESSMENT

The purposes of these self-assessment tools are to:

(a) Provide a method by which you can report your current knowledges and skills as well as those which you identify as needing further development;

(b) Acquaint you with the knowledges and skills which are believed to be important in the role of oncology nurse educator; and

(c) Assist the faculty in planning learning experiences which will reflect your individual learner differences.

CLINICAL SKILLS INVENTORY

	can function independently	need supervision only	need instruction only	need instruction & supervision
A. Diagnosis Phase				
1. Take a client history				
2. Do individual assessment:				
a. skin				
b. head & neck				
c. pulmonary				
d. cardiovascular				
e. abdominal				
f. genitourinary				
g. musculoskeletel				
h. neurological				
i. psychosocial				
j. nutritional				
k. pain				
3. Do a family assessment				
4. Prepare client for diagnostic procedure:				
a. bone marrow aspiration				
b. CAT scan				
c. bronchoscopy				
d. colonoscopy				

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CLINICAL SKILLS IVENTORY
(continued)

	can function independently	need supervision only	need instruction only	need instruction & supervision
e. arteriogram				
f. lymphangiogram				
g. cytology				
h. laparotomy				

B. Treatment Phase

1. Participate in blood component therapy:

a. platelet transfusion				
b. packed red blood cells administration				
c. white blood cell administration				
2. Participate in immunotherapy administration				

3. Care for client receiving radiation therapy:

a. external radiation therapy				
b. implant therapy				
c. management of side effects				
4. Do enterostomal management				
5. Manage nausea and vomiting				
6. Participate in Nutritional Management				

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CLINICAL SKILLS INVENTORY
(continued)

	can function independently	need supervision only	need instruction only	need instruction & supervision
7. Design and implement plan for pain management:				
a. drugs				
b. behavior modification				
c. biofeedback				
8. Care of client with Hickman catheter				
9. Participate in chemptherapy administration:				
a. manage side effects of medications				
b. care of client on chemotherapy at home				
10. Use infection control with a compromised host				
11. Develop nursing care policies:				
a. care standards				
b. procedures				
c. protocols				
C. Rehabilitation Phase				
1. Design and implement an oncology client education program using community resources				
2. Evaluate an oncology unit education program				

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CLINICAL SKILLS INVENTORY
(continued)

	can function independently	need supervision only	need instruction only	need instruction & supervision
3. Conduct support/teaching groups:				
a. for individuals				
b. for families				
4. Plan a home care program to regain or maintain activities of daily living				
D. Continued Supportive Care 1. Give care to clients who choose to have no medical treatment				
2. Give care to clients who choose alternative methods of care (i.e. laetrile, diet, touch, imagery)				
E. Terminal Care				
1. Provide care to the client with terminal cancer:				
a. physical care				
b. psychosocial care				
2. Provide counseling during the grief process:				
a. for individuals				
b. for families				

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MANAGEMENT SKILLS INVENTORY	Can function independently	Need supervision only	Need instruction only	Need instruction & supervision
1. Use management by objectives (MBO)				
2. Plan a resource for health care delivery:				
a. establish specific unit for client care				
b. establish a large agency for client care				
3. Participate in contract negotiation:				
a. develop contract or proposal				
b. participate in collective bargaining				
4. Organize resources:				
a. acquire supplies				
b. develop budget - ZBB, MBO, PPD				
c. establish staffing patterns				
d. establish lines of communication				
e. establish delegation of responsibility				
5. Use performance evaluation tool:				
a. use quality assurance/audit				
b. use self-assessment evaluation				
c. use peer review evaluation				
6. Develop nursing care policies:				
a. develop care standards				
b. develop procedures				
c. develop protocols				

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EDUCATOR SKILLS INVENTORY

	can function independently	need supervision only	need instruction only	need instruction & supervision
1. Develop instrument for needs assessment				
2. Implement needs assessment				
3. Develop conceptual framework:				
a. use of specific nursing theory (Roy, Orem, Johnson)				
b. use eclectic model				
c. use a specific learning theory				
4. Develop program objectives				
5. Organize a specific body of content into curriculum design				
6. Develop behavioral objectives in 3 domains:				
a. cognitive				
b. affective				
c. psychomotor				
7. Use audiovisual media				
8. Use classroom teaching strategies:				
a. lecture				
b. seminar				
c. team				
d. modules				

EDUCATOR SKILLS INVENTORY
(continued)

	can function independently	need supervision only	need instruction only	need instruction & supervision
9. Use clinical teaching strategies				
10. Develop evaluation procedures/tools:				
a. objective examinations				
b. self-assessment tools				
c. clinical evaluation tools				
d. examination for simulated practice performance (skills)				

RESEARCH SKILLS INVENTORY

	can function independently	need supervision only	need instruction only	need instruction & supervision
1. Critique research				
2. Write Institutional Review Board Protocol				
3. Design research studies:				
a. descriptive				
b. historical				
c. case study				
d. quasi-experimental				
e. experimental				
4. Conduct research:				
a. formulate the problem				
b. state the purpose				
c. review the literature				
d. develop a theoretical framework				
e. formulate hypotheses				
f. identify research variable				
g. define terms				
h. identify assumptions				
i. identify limitations				
j. design methodology				
k. describe setting				

RESEARCH SKILLS INVENTORY
(continued)

	can function independently	need supervision only	need instruction only	need instruction & supervision
l. select sample				
m. collect data				
n. analyze data				
o. interpret results				
p. communicate findings				

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CONSULTANT SKILLS INVENTORY

	can function independently	need supervision only	need instruction only	need instruction & supervision
1. Identify the need for consultation				
2. Formulate a contract for consultation which:				
a. defines role				
b. defines function				
c. defines relationship				
d. establishes time frame				
e. identifies product (expected outcome)				
f. specifies financial reimbursement				
3. Utilize the problem-solving process				
4. Function as a group leader				
5. Utilize knowledge of group dynamics				
6. Use of variety of consultant interventions:				
a. acceptant				
b. catalytic				
c. confrontation				
d. prescription				
e. theories & principles				